

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND

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ROBYN KRAVITZ, et al.,

Plaintiffs,

v.

UNITED STATES DEPARTMENT OF COMMERCE,  
et al.,

Defendants.  
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x  
: Case No. 18-cv-01041  
:  
: Hon. George Hazel  
:  
: **DECLARATION OF**  
: **KIMBALL W. BRACE**  
:  
:  
:  
:  
x

Pursuant to 28 U.S.C. § 1746, I, Kimball W. Brace, hereby declare and state as follows:

1. I am over the age of eighteen years. I have personal knowledge of the facts set forth herein or believe them to be true based on my experience or upon personal information provided to me by others, and I am competent to testify thereto.

2. I have been retained as an expert for Plaintiffs in *Kravitz et al v. United States Department of Commerce, et al.*, Case No. 18-cv-01041-GJH.

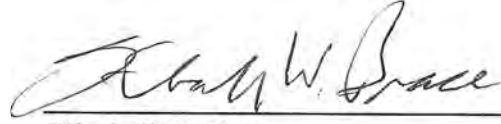
3. In my capacity as an expert witness, I prepared two reports in this litigation. True and correct copies of these reports are attached hereto.

4. These reports contain my expert opinions on the topics I was asked to examine.

5. If asked to testify at trial in this action, I would testify to the opinions and the bases therefor set forth more fully in the attached reports.

6. I am being compensated at the hourly rate of \$275 for my work on this matter, payment of which is not contingent on the substance of my testimony.

I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in black ink, appearing to read "Kimball W. Brace", written over a horizontal line.

Kimball W. Brace

Executed on November 20<sup>th</sup>, 2018 in Manassas Va.

# EXHIBIT A

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND**

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ROBYN KRAVITZ, *et al.*

*Plaintiffs,*

v.

U.S. DEPARTMENT OF COMMERCE, *et al.*

*Defendants.*

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Civil Action No. 8:18-cv-01041-GJH

Hon. George J. Hazel

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LA UNIÓN DEL PUEBLO ENTERO; *et al.*

*Plaintiffs,*

v.

WILBUR L. ROSS, sued in his official  
capacity as U.S. Secretary of Commerce; *et al.*

*Defendants.*

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Civil Action No. 8:18-cv-01570-GJH

Hon. George J. Hazel

**RULE 26(A)(2)(B) EXPERT REPORT AND DECLARATION OF KIMBALL W. BRACE**



**EXPERT REPORT AND DECLARATION OF KIMBALL W. BRACE  
OCTOBER 5, 2018**

**I. INTRODUCTION**

I am the president of Election Data Services, Inc. (E.D.S. Inc.), a Manassas, Virginia-based consulting firm whose specialty is reapportionment, redistricting matters, election administration issues, and the census.

I have been retained by the plaintiffs in *Kravitz, et al. v. United States Department of Commerce, et al.*, Case No. 8:18-cv-01041 (D. Md.) and *La Unión del Pueblo Entero et al. v. Wilbur L. Ross et al.*, Case No. 8:18-cv-01570 (D. Md.). I have been asked to assess the impact of a differential undercount of certain demographic groups in the 2020 decennial census (the “2020 Census”) on (i) the apportionment of Congressional seats following the 2020 Census, and (ii) the dilution of the votes of people living in certain counties as a result of intrastate redistricting. I have also been asked to make certain quantitative projections for purposes of evaluating the impact of such an undercount on the allocation of federal funding.

All the materials considered in forming the opinions contained herein are identified in this report. I am being compensated for my work on this matter at an hourly rate of \$275.

**II. BACKGROUND AND QUALIFICATIONS**

I attended American University in Washington, D.C., from 1969 through 1974 (having taken a year off for the 1972 campaign), where I earned a B.A. degree in Political Science. I started E.D.S. Inc. in 1977, and have been with the company since that time. Prior to 1977, I was a journalist and employed by companies like NBC News, Congressional Quarterly, and Plus Publications. While I was with NBC News, I was a researcher, advance man, and, during the 1972 election year, an election analyst for the NBC News Elections Unit. One of my responsibilities was to follow the redistricting process that occurred after the 1970 census. At Congressional Quarterly, I was in charge of congressional voting studies. At Plus Publications, I was Associate Editor of a newsletter called *Election Administration Reports*, a bi-weekly publication for state and county election administrators and registrars of voters. A copy of my curriculum vitae is attached as **Exhibit 1**.

As president of E.D.S. Inc., I supervise and direct all major projects in which the



company is involved.

E.D.S. Inc. has been viewed by clients, the press, academics, and the general public as a research facility and consulting firm dealing with many aspects of the electoral process. The company and its staff have been hired by state and local governments across the nation to provide software, database development services, and consulting services for the creation of districting plans and the analysis of many aspects of the apportionment and redistricting process.

Since 1979, I, individually and with E.D.S. Inc., have been actively involved in many aspects of the redistricting and reapportionment process, having gone through four full census and redistricting cycles. We have already been retained by several states for the planning and database activities associated with the 2020 redistricting process. I have been a consultant to many state and local governmental organizations around the nation, providing strategic advice and consulting on redistricting matters, coordinating the development of the databases used in the redistricting process, creating and assisting others with the creation of districting plans, and analyzing many aspects of districts and district configurations. Over the past 39 years, E.D.S. Inc.'s clients for redistricting services have come from more than half the states in the nation. Most notable have been our efforts to calculate compactness measures for both congressional and state legislative districts in all 50 states. We were also retained by the U.S. Department of Justice, Civil Rights Division, to assist with the building of a massive database of election returns and geography for evaluating racial bloc voting and redistricting plans in the State of South Carolina. In addition, over the past three decades, I have been called upon to provide reports, expert witness testimony, and assistance to attorneys in more than 70 different court cases.

Further, I frequently give speeches to groups and organizations and participate in numerous conferences and panels on various aspects of apportionment, redistricting, and the census. Since the early 1980s, I have been a regular participant and speaker at annual and bi-annual meetings of the Task Force on Redistricting of the National Conference of State Legislatures. I was also appointed by the U.S. Secretary of Commerce to the 2010 Census Advisory Committee, a 20-person advisory board to the Director of the Census Bureau and served for two terms. Further, I was sent by the U.S. State Department and the International Foundation for Electoral Systems (IFES) to Kazakstan to present a three-day workshop on redistricting. I am regularly called upon by members of the press with questions on redistricting, reapportionment, the census, election administration issues, and politics in general.

In addition to its redistricting work, E.D.S. Inc. provides assistance in the election administration field to state and local jurisdictions in such areas as precinct management, voter registration systems, and voting equipment evaluation. E.D.S. Inc. regularly collects



election returns for each state in the nation. In 1992, the company published a 500-page volume of county-level voter registration and voter turnout data, and election returns for the entire nation (The Election Data Book: A Statistical Portrait of Voting in America, 1992 (Bernan Press, 1993)). While we only published the single volume, we have continued to compile an electronic county-level database for each general election since that time, which we sell to numerous institutions and organizations.

I personally have been involved in the election administration field for over 40 years. I have worked for federal government clients (Federal Election Commission, Election Administration Commission, GAO, Library of Congress) along with a number of state governments on different aspects of election administration. These include studies on voter registration systems as well as voting equipment. Since 2008, I have been a poll worker in Prince William County, VA where I live. Because the state holds elections every year and due to my interest in all aspects of election administration, I have graduated to now being "chief judge" in the precincts that I have been assigned to work. In 2012, the county experienced long lines at the polls on Election Day, and I was then appointed to a 20-person task force by the County Board of Supervisors to investigate the cause of the problems. Because of my data background, I compiled and analyzed all the data used by the task force, presenting updates at our bi-weekly meetings over the 5-month life of the task force. With the retirement of the County's General Registrar (director of elections for the county), I was asked to take over the 11-person office. While I declined the full time job offer, I did agree to be the Acting General Registrar for four months while the county conducted a search for a full time replacement. I have continued to be actively involved in election administration issues within the county since that time.

Initially, E.D.S. Inc. conducted redistricting activities the old-fashioned way, using paper maps, lots of acetate, and plenty of color pencils. In order to see where different racial, ethnic origin, and political groups were located in a jurisdiction, we colored thematic maps by hand. Unfortunately, that meant careful planning for what colors would show what percentage range. It was too time consuming to try one set of ranges, then change, and make another map.

However, with the advent of personal computers in the early 1980s, we began using some of the earliest mapping software packages, usually to produce color maps for exhibits in court cases. This ultimately led us to more extensive geographic information system (GIS) software packages and our own development of redistricting software that was used in numerous state and local redistricting projects in the 1990 round. We continued developing GIS software applications to help state governments compile precinct configurations for submission to the Census Bureau under P.L. 94-171 (whereby, census data was compiled by precinct for use in redistricting). We developed analysis software for use during the 2000 and 2010 redistricting process, and have utilized both major



redistricting software packages over the past two decades.

Over the past nearly 40 years, we have compiled extensive databases for use in redistricting and court cases in a number of different states and localities.

### **III. U.S. CONGRESSIONAL REAPPORTIONMENT: BASELINE PROJECTIONS FOR 2020**

In the mid-1980s, E.D.S. Inc. developed software to calculate the distribution of congressional districts to the states based on population or other data. Initially developed in the Basic programming language, in the early 1990s, we reprogrammed it as macros for Excel spreadsheets. The program implemented the “method of equal proportions” formula that was adopted by the U.S. Congress in 1941 as the official manner to divide seats in the US House of Representatives among the states. As the Constitution stipulates, each state is provided at least one initial seat in the House of Representatives. The formula is actually used to apportion the remaining 385 districts. The formula works as follows:

The rest of the seats are handed out based on statistical “priority values” assigned to each additional seat that a state might get. In as close to plain English as the formula will allow, these priority values are calculated in a two-step process that requires dividing a state’s population by the square root of the product of the number of seats it’s already been assigned and that number plus one. The priority numbers are then rank ordered: “State A” will get an additional seat if its priority value for that seat is greater than any other state’s. The seats are disbursed to states based on these rankings until all 435 have been awarded.<sup>1</sup>

Our reapportionment program calculates not only how many seats each state would receive based on the population or other numbers put into the formula, but it also calculates and reports the number of people a state gained its last seat by or lost the next seat by. It reports the last seat number that is given to a state, as well as what number seat the next district would be if the calculations continued past the 435 seat cut-off. The program also allows the user to change the maximum number of seats to be calculated. Finally, the program calculates the ideal district size for each state, by taking the state’s total population and dividing it by the number of seats that the state has been awarded.

On at least a yearly basis, we have utilized the apportionment program to analyze the Census Bureau’s annual state population estimates, which are usually released in late

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<sup>1</sup> Greg Giroux, “Before Redistricting, That Other ‘R’ Word,” CQ Weekly (Nov. 30, 2009); *see also* Kristin D. Burnett, “Congressional Apportionment: 2010 Census Briefs,” U.S. Census Bureau (Nov. 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-08.pdf>.



December each year. Our resulting studies and press releases have been consistently referenced by the media and scholars. Our studies are usually released the same day the Census Bureau estimates are unveiled and can be found on our website ([www.electiondataservices.com](http://www.electiondataservices.com)). All of our historical studies (back to when we started them in 1994) and press releases are also kept on our website, available for all to see. The same tables have also been generated from the final decennial population numbers each decade back to 1940. Our website also has a historical table, that we have continued to update, showing the number of seats given to each state each decade back to the nation's founding in 1789.

We can utilize the annual estimates from the Bureau to create reliable projections of what the population, by state, might be at the time of the next decennial census (April 1 of the year ending in "0") and test those estimates on the anticipated deviations that will result. We do this projection each year and report the results in our press releases. A copy of our most recent study, released December 26, 2017, is attached to this report as **Exhibit 2**. For the purposes of studying the 2017 population estimates released by the Census Bureau in December 2017, E.D.S. Inc. created a series of estimates for possible 2020 population projections based upon various amounts of change that were apparent in the Bureau's data. The three trend models used various time factors that the change would be calculated upon.

First, there is a "long-term" trend model that reflects the overall change that has occurred so far in the decade – for this decade that is from 2010 to 2017 – and projects it forward to correspond to census day on April 1, in the year ending in "0" – at this point in this decade that would be two years and nine months to correspond to census day on April 1, 2020. Second, we utilize a "mid-term" trend model that uses the population change from a three to four year period before the Census estimates were released – for our study noted as **Exhibit 2** – that occurred from 2014 to 2017 and projects that level of change forward to 2020. Finally, we create a "short-term" trend model that incorporates the change that occurred in just the past year – at this point for **Exhibit 2** – from 2016 to 2017, and carries that rate of change forward to 2020.

For 2020, I believe the mid-term model provides the most reliable projection of population estimates. The long-term model incorporates demographic factors that may have been significant early in the decade but are no longer operative, while the short-term model may overstate the significance of a single year of demographic change. Furthermore, the projections based on the mid-term model are similar to the nationwide population



projection that the Census Bureau has provided for 2020.<sup>2</sup>

Using the 2017 population estimates, I am able to calculate a projected allocation of seats in the House of Representatives. I calculate the number of seats to be apportioned to each State based upon the so-called “method of equal proportions.” As discussed above, under this formula, the population of each state is multiplied by a constant that is mathematically determined to test the priority of each state for an additional seat in the House. The only variable entered into the formula is the population of the states, as reported in the decennial Census. Any variation in the population will modify the priority ranking of the states and can cause a state to lose, or to fail to gain, an additional seat. Using the 2014-2017 mid-term model to project the population of the states in 2020, I have estimated the apportionment of seats in the House of Representatives after the 2020 Census. These projections are at Table 1 in **Exhibit 3** to this report.

#### **IV. U.S. CONGRESSIONAL REAPPORTIONMENT: EFFECT OF CENSUS CITIZENSHIP QUESTION IN 2020**

I understand that it is expected that the inclusion of a citizenship question on the 2020 Census questionnaire will result in a differential undercount of Hispanics<sup>3</sup> and non-citizens relative to the rest of the population. I was asked to assess the effect on reapportionment of a differential undercount of 2, 5.8, and 8.09 percentage points for these affected populations.<sup>4</sup>

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<sup>2</sup> As noted in the press release report, the 2017 population estimates have not been statistically adjusted for any known undercount, nor were there estimates provided for U.S. military personnel overseas. This latter component has in the past been counted by the Department of Defense and the Census Bureau and allocated to the states. The Bureau and the administration announced earlier this year a potential change in the way the military and citizens living abroad will be counted in the Census for 2020, and this will likely also impact the apportionment process.

<sup>3</sup> I use the term “Hispanic” as shorthand for the “Hispanic or Latino” population. According to the Census Bureau, “Hispanic or Latino” is a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. See “Hispanic Origin,” U.S. Census Bureau, <https://www.census.gov/topics/population/hispanic-origin/about.html>.

<sup>4</sup> I understand that Nancy Mathiowetz, another expert witness retained by the plaintiffs, has estimated that the differential undercount for Hispanics and non-citizens will be at least 2%. The Census Bureau has estimated a 5.8% differential self-response for households that contain a noncitizen. And I understand that Matthew Barreto, another retained expert, conducted a phone survey that suggested a possible 8.09% differential undercount for Hispanics.



To evaluate this effect, I undertook the following analysis:

**First**, for each state, I projected the percentage of the total 2020 statewide population that will be (i) Hispanic individuals, (ii) non-citizens, and (iii) non-Hispanic non-citizens (the “Affected Groups”). (I calculated the percentage of *non-Hispanic* non-citizens to avoid double-counting, in the following steps, the undercount effect for individuals who are both Hispanic and non-citizens.) To do this, I used a linear trend based on 1-year ACS data from 2014 to 2017.

**Second**, I applied the undercount rates of 2%, 5.8% and 8.09% to the projected Hispanic and non-Hispanic non-citizen percentage of the statewide population and multiplied this by the total projected population for the state (derived from Table 1) to calculate the total number of individuals in the state who will not be counted due to the citizenship question.<sup>5</sup> I then deducted this number from the baseline population projections in Table 1 to project 2020 Census population counts for each state.

**Third**, using the same methodology described in the previous section, I calculated the projected number of Congressional seats apportioned to each state based on the projected 2020 Census population counts. I then compared this projected apportionment to the baseline projections set forth in Table 1 above.

The results of my analysis are presented in Table 2A (2% undercount), 2B (5.8% undercount), and 2C (8.09% undercount) in the attached **Exhibit 3**. As this shows, a 2% differential undercount of Hispanics and non-citizens will cause California to lose a Congressional seat. A 5.8% undercount will cause California and Texas to lose a seat. And a 8.09% differential undercount will cause Arizona, California, and Texas to lose a seat. Because those states have higher percentages of both Hispanics and non-citizens than the nation as a whole, if the differential undercount for these groups is larger, they may lose additional seats. In addition, because Florida, Nevada, and New Jersey also have higher percentages of both Hispanics and non-citizens than the nation as a whole, a larger differential undercount among those groups increases the risk that these states will lose a Congressional seat as well.

## V. CONGRESSIONAL AND STATE LEGISLATIVE REDISTRICTING: EFFECT OF CENSUS CITIZENSHIP QUESTION IN 2020

I have been asked to calculate the extent to which differential undercounts of the

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<sup>5</sup> I assumed that for the rest of the population, the undercount due to the citizenship question would be 0%. This assumption does not affect my overall conclusion, because if the overall undercount rate is higher but the differential undercount for Hispanics and non-citizens remains the same, that will only exacerbate the effect of the undercount.



Hispanic and non-citizen populations of 2%, 5.8%, and 8.09% will dilute the votes of individuals residing in the following counties: Clark (NV), Dallas (TX), El Paso (TX), Harris (TX), Hidalgo (TX), Hudson (NJ), King (WA), Los Angeles (CA), Maricopa (AZ), Miami-Dade (FL), Prince George's (MD), Santa Cruz (AZ), Todd (SD), Webb (TX), and Yuma (AZ) Counties. I understand that all of the states in which these counties are located use Census data to draw congressional and state legislative districts of equal size.

To evaluate this, I undertook the following analysis, as reflected in Tables 3A (2% undercount), 3B (5.8% undercount), and 3C (8.09% undercount) in the attached **Exhibit 3:**

**First**, as a baseline, I projected the population for each county and the rest of the state in 2020. I then calculated the county's projected share of the projected statewide population in 2020. Because the Census does not provide annual population estimates for all counties, I used a trendline based on 5-year ACS data from 2013-2016.

**Second**, for each county and the rest of the state, I projected the percentage of the total 2020 population that will be (i) Hispanic individuals, (ii) non-citizens, and (iii) non-Hispanic non-citizens. To do this, I used a trendline based on 5-year ACS data from 2013-2016.

**Third**, for Hispanics and non-Hispanic non-citizens, I applied undercount rates to their projected percentage of the population for each county (and the rest of the state)<sup>6</sup> to calculate the total number of individuals residing in the county (and the rest of the state) who would not be counted in the 2020 Census as a result of the citizenship question. I then deducted this number from the baseline population projection for 2020 for the county to project Census population counts for each county (and the rest of the state) and each county's projected share of the statewide Census population count.

**Fourth**, to assess whether the undercount would cause the county's residents to suffer vote dilution, I calculated the absolute and percentage change between (i) the county's share of the statewide population based on the baseline population projections, and (ii) the county's share of the statewide Census population count.

My results show that for individuals residing in each of the counties listed in the

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<sup>6</sup> I assume that there will be no undercount for the rest of the population. However, this is a conservative assumption because if the differential undercount is assessed relative to a higher undercount rate for the rest of the population, the effect of the undercount will be even stronger.



table, the undercount resulting from the addition of a citizenship question will have the effect of diluting their vote. Because each of the states in question uses Census population counts to draw legislative districts of equal size, a reduction in the share of the statewide population for a given county will shift political representation from the county to the rest of the state.<sup>7</sup>

Although I have estimated the effect of a differential undercount of 2%, 5.8%, and 8.09% among Hispanics and non-citizens, an undercount of Hispanics and non-citizens of any magnitude will produce this effect for the counties in question because they all have higher percentages of Hispanics and non-citizens than the rest of the state.

## **VI. FEDERAL FUNDING STREAMS: EFFECT OF CENSUS CITIZENSHIP QUESTION**

### **Medicaid Funding**

For purposes of evaluating the effect of an undercount on Medicaid funding, I was asked to project for July 1 of 2020, 2021, and 2022 the following: (i) statewide population totals, (ii) the percentage of each state that will be composed of Hispanics, (iii) the percentage of each state that will be non-Hispanic non-citizens, and (iv) statewide population totals assuming a differential undercount of the Hispanic and non-citizen populations of 2 percent, relative to the rest of the population.

I undertook the following analysis to make these projections:

- I used the same methodology detailed above in Section IV to project statewide population totals for July 1 of each year.
- I used the same methodology detailed above in Section IV to project the relevant statewide demographic percentages for July 1 of each year.
- I used the same methodology detailed above in Section IV to project statewide population totals with an undercount for July 1 of each year.

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<sup>7</sup> I note that with respect to the dilution of one's vote, it is irrelevant which baseline population projections are used. No matter what the actual population of the geographic areas in question, as long as the undercounted groups are a higher percentage of the county than the state as a whole, the votes of the individuals living in the county will be diluted.



The results of my projections are set forth in Tables 4A, 4B, and 4C in **Exhibit 3**.

### **Transportation Funding**

For purposes of evaluating the effect of an undercount on transportation funding, I was asked to project for April 1, 2020 the following: (i) population totals for certain urbanized areas,<sup>8</sup> (ii) the percentage of each urbanized area that will be composed of Hispanics, (iii) the percentage of each urbanized area that will be non-Hispanic non-citizens, and (iv) population totals for certain urbanized areas assuming a differential undercount of the Hispanic and non-citizen populations of 2 percent, relative to the rest of the population. I was also asked to make these projections for the states in which these urbanized areas are located.

I undertook the following analysis to make these projections:

- To project population totals for April 1, 2020 for urbanized areas that do not cross state boundaries, I used a trendline based on 1-year ACS data from 2014-2017. I used the same methodology for the corresponding states,<sup>9</sup> as I understand that the transportation funding allocated to a particular urbanized area depends on the urbanized area's population relative to that of the state as a whole. For urbanized areas that cross state boundaries, I used a trendline based on 5-year ACS data from 2014-2016 to project the population total for the relevant state's portion of the urbanized area,<sup>10</sup> as 1-year ACS data are not available for portions of urbanized areas. I used the same methodology for the corresponding states.<sup>11</sup>
- To project the relevant demographic percentages for April 1, 2020 for urbanized areas that do not cross state boundaries, I used a trendline based on 1-year ACS data from 2014-2017. I used the same methodology for the corresponding states. For urbanized areas that cross state boundaries, I used a trendline based on 5-year ACS data from 2014-2016 to project the relevant demographic percentages for the relevant state's portion of the urbanized

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<sup>8</sup> For purposes of the Surface Transportation Block Grant Program funding formula, an "urbanized area" is an area that meets both of the following criteria: (1) it was designated as an "urban area" by the Census Bureau on the most recent decennial census; and (2) it has a population over 200,000.

<sup>9</sup> These states are: Arizona, California, Florida, Georgia, Nevada, and Texas.

<sup>10</sup> These urbanized areas are the Maryland portion of Washington, DC-VA-MD; the New Jersey portion of New York – Newark, NY – NJ – CT; and the Texas portion of El Paso, TX-NM.

<sup>11</sup> These states are: Maryland and New Jersey.

area. I used the same methodology for the corresponding states.


- For all urbanized areas, to project population totals with an undercount for April 1, 2020, I applied a differential undercount rate of 2 percent to the projected Hispanics and non-Hispanic non-citizen shares of the urbanized area population to determine the percentage of the overall urbanized area population that will not be counted in the 2020 Census as a result of the citizenship question ("Urbanized Area Undercount Rate"). I then applied the Urbanized Area Undercount Rate to the baseline population projections in Table 5 to project 2020 Census population counts for each urbanized area.
- For all states, to project population totals with an undercount for April 1, 2020, I applied a differential undercount rate of 2 percent to the projected Hispanics and non-Hispanic non-citizen shares of the state population to determine the percentage of the overall state population that will not be counted in the 2020 Census as a result of the citizenship question ("State Undercount Rate"). I then applied the State Undercount Rate to the baseline population projections in Table 6 to project 2020 Census population counts for each state.

The results of my projections are set forth in Table 5 (urbanized areas) and Table 6 (states).

\* \* \*

I reserve the right to supplement this report if I become aware of additional information or documentation that would require further analysis and any modification or addition to my opinions as stated herein.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

  
Kimball William Brace

Executed on October 5, 2018 in San Jose, California.

# EXHIBIT 1



## VITA

### KIMBALL WILLIAM BRACE

Election Data Services, Inc.  
6171 Emerywood Court  
Manassas, VA 20112-3078

703 580-7267 or 202 789-2004 phone  
703 580-6258 fax

[kbrace@electiondataservices.com](mailto:kbrace@electiondataservices.com) or [kbrace@aol.com](mailto:kbrace@aol.com)

Kimball Brace is the president of Election Data Services Inc., a consulting firm that specializes in redistricting, election administration, and the analysis and presentation of census and political data. Mr. Brace graduated from the American University in Washington, D.C., (B.A., Political Science) in 1974 and founded Election Data Services in 1977.

### **Redistricting Consulting**

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Activities include software development; construction of geographic, demographic, or election databases; development and analysis of alternative redistricting plans; general consulting, and onsite technical assistance with redistricting operations.

#### *Congressional and Legislative Redistricting*

Arizona Independent Redistricting Commission: Election database, 2001

Arizona Legislature, Legislative Council: Election database, 2001

Colorado General Assembly, Legislative Council: Geographic, demographic, and election databases, 1990–91

Connecticut General Assembly

- Joint Committee on Legislative Management: Election database, 2001; and software, databases, general consulting, and onsite technical assistance, 1990–91
- Senate and House Democratic Caucuses: Demographic database and consulting, 2001

Florida Legislature, House of Rep.: Geographic, demographic, and election databases, 1989–92

Illinois General Assembly

- Speaker of House and Senate Minority Leader: Software, databases, general consulting, and onsite technical assistance, 2000–02,
- Speaker of House and President of Senate: Software, databases, general consulting, and onsite technical assistance, 2018-current, 2009-2012, 1990–92, and 1981-82

Iowa General Assembly, Legislative Service Bureau and Legislative Council: Software, databases, general consulting, and onsite technical assistance, 2000–01 and 1990–91

Kansas Legislature: Databases and plan development (state senate and house districts), 1989

Massachusetts General Court

- Senate Democratic caucus: Election database and general consulting, 2001–02
- Joint Reapportionment Committees: Databases and plan development (cong., state senate, and state house districts), 1991–93, 2010-2012



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**(Redistricting Consulting, cont.)**

Michigan Legislature: Geographic, demographic, and election databases, 1990–92; databases and plan development (cong., state senate, and state house districts), 1981–82

Missouri Redistricting Commission: General consulting, 1991–92

Commonwealth of Pennsylvania: General consulting, 1992

Rhode Island General Assembly and Reapportionment Commissions

- Software, databases, plan development, and onsite assistance (cong., state senate, and state house districts), 2016– current, 2010–2012, 2001–02 and 1991–92
- Databases and plan development (state senate districts), 1982–83

State of South Carolina: Plan development and analysis (senate), U.S. Dept. of Justice, 1983–84

Local Government Redistricting

Orange County, Calif.: Plan development (county board), 1991–92

City of Bridgeport, Conn.: Databases and plan development (city council), 2011–2012 and 2002–03

Cook County, Ill.: Software, databases, and general consulting (county board), 2010–2012, 2001–02, 1992–1993, and 1989

Lake County, Ill.: Databases and plan development (county board), 2011 and 1981

City of Chicago, Ill.: Software, databases, general consulting, and onsite technical assistance (city wards), 2010–2012, 2001–02 and 1991–92

City of North Chicago, Ill.: Databases and plan development (city council), 1991 and 1983

City of Annapolis, Md.: Databases and plan development (city council), 1984

City of Boston, Mass.: Databases and plan development (city council), 2011–2012, 2001–2002, and 1993

City of New Rochelle, N.Y.: Databases and plan development (city council), 1991–92

City of New York, N.Y.: Databases and plan development (city council), 1990–91

Cities of Pawtucket, Providence, East Providence, and Warwick, and town of North Providence, R.I.: Databases and plan development (city wards and voting districts), 2011–2012, 2002

City of Woonsocket and towns of Charlestown, Johnston, Lincoln, Scituate and Westerly, R.I.: Databases and plan development (voting districts), 2011–2012, 2002; also Westerly 1993

City of Houston, Tex.: Databases and plan development (city council), 1979 — recommended by U.S. Department of Justice

City of Norfolk, Va.: Databases and plan development (city council), 1983–84 — for Lawyers' Committee for Civil Rights

Virginia Beach, Va.: Databases and plan development (city council), 2011–2012, 2001–02, 1995, and 1993

Other Activities

International Foundation for Electoral Systems (IFES) and U.S. Department of State: redistricting seminar, Almaty, Kazakhstan, 1995



Kimball W. Brace, Vita, page 3

Library of Congress, Congressional Research Service: Consulting on reapportionment, redistricting, voting behavior and election administration

National Conference of State Legislatures (NCSL): Numerous presentations on variety of redistricting and election administration topics, 1980 - current

## **Election Administration Consulting**

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Activities include seminars on election administration topics and studies on voting behavior, voting equipment, and voter registration systems.

Prince William County, VA:

2013 – Appointed by Board of County Supervisors to 15 member Task Force on Long Lines following 2012 election. Asked and appointed by County's Electoral Board to be Acting General Registrar for 5-month period between full-time Registrars.

2008 - current – poll worker and now chief judge for various precincts in county

U.S. Election Assistance Commission (EAC): Served as subcontractor to prime contractors who compiled survey results from 2008 and 2010 Election Administration and Voting Survey.

U.S. Election Assistance Commission (EAC): Compile, analyze, and report the results of a survey distributed to state election directors during FY–2007. Survey results were presented in the following reports of the EAC: *The Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office, 2005–2006, A Report to the 110th Congress*, June 30, 2007; *Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA), Survey Report Findings*, September, 2007; and *The 2006 Election Administration and Voting Survey, A Summary of Key Findings*, December, 2007.

U.S. Election Assistance Commission (EAC): Compile, analyze, and report the results of three surveys distributed to state election directors during FY–2005: Election Day, Military and Overseas Absentee Ballot (UOCAVA), and Voter Registration (NVRA) Surveys. Survey results were presented in the following reports: *Final Report of the 2004 Election Day Survey*, by Kimball W. Brace and Dr. Michael P. McDonald, September 27, 2005; and *Impact of the National Voter Registration Act of 1993 on the Administration of Elections for Federal Office, 2003–2004, A Report to the 109th Congress*, June 30, 2005.

Rhode Island Secretary of State: Verification of precinct and district assignment codes in municipal registered voter files and production of street files for a statewide voter registration database, on-going maintenance of street file, 2004-2006, 2008-2014, 2016-2017.

Rhode Island Secretary of State, State Board of Elections & all cities & towns: production of precinct maps statewide, 2012, 2002, 1992

District of Columbia, Board of Elections and Ethics (DCBOEE): Verification of election ward, Advisory Neighborhood Commission (ANC), and Single-Member District (SMD) boundaries and production of a new street locator, 2003. Similar project, 1993.

Harris County, Tex.: Analysis of census demographics to identify precincts with language minority populations requiring bilingual assistance, 2002–03



Kimball W. Brace, Vita, page 4

**(Election Administration Consulting, cont.)**

Cook County, Ill., Election Department and Chicago Board of Election Commissioners:

- Analysis of census demographics to identify precincts with language minority populations requiring bilingual assistance, 2010-2013, 2002-03
- Study on voting equipment usage and evaluation of punch card voting system, 1997

Chicago Board of Election Commissioners: Worked with Executive Director & staff in Mapping Dept. to redraw citywide precincts, eliminate over 600 to save costs, 2011-12

Library of Congress, Congressional Research Service: Nationwide, biannual studies on voter registration and turnout rates, 1978-2002

U.S. General Accounting Office (GAO), U.S. Dept. of Justice, and numerous voting equipment vendors and media: Data on voting equipment usage throughout the United States, 1980-present

Needs assessments and systems requirement analyses for the development of statewide voter registration systems:

- Illinois State Board of Elections: 1997
- North Carolina State Board of Elections, 1995
- Secretary of Commonwealth of Pennsylvania, 1996

Federal Election Commission, Office of Election Administration:

- Study on integrating local voter registration databases into statewide systems, 1995
- Nationwide workshops on election administration topics, 1979-80
- Study on use of statistics by local election offices, 1978-79

Cuyahoga County, Ohio, Board of Elections: Feasibility study on voting equipment, 1979

Winograd Commission, Democratic National Committee: Analysis of voting patterns, voter registration and turnout rates, and campaign expenditures from 1976 primary elections

## **Mapping and GIS**

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Activities include mapping and GIS software development (geographic information systems) for election administration and updating TIGER/Line files for the decennial census.

2000 Census Transportation Planning Package (CTPP), 1998-99: GIS software for the U.S. Department of Transportation to distribute to 400 metropolitan planning organizations (MPOs) and state transportation departments for mapping traffic analysis zones (TAZs) for the 2000 census; provided technical software support to MPOs

Census 2000, 2010 and 2020 Redistricting Data Program, Block Boundary Suggestion Project (Phase 1) and Voting District Project (Phase 2), 1995-99: GIS software and provided software, databases, and technical software support to the following program participants:

- Alaska Department of Labor
- Connecticut Joint Committee on Legislative Management
- Illinois State Board of Elections
- Indiana Legislative Services Agency
- Iowa Legislative Service Bureau



Kimball W. Brace, Vita, page 5

**(Mapping & GIS Support, cont.)**

- New Mexico Legislative Council Service
- Rhode Island General Assembly
- Virginia Division of Legislative Services

Developed PRECIS® Precinct Information System—GIS software to delineate voting precinct boundaries—and delivered software, databases, and technical software support to the following state and local election organizations (with date of installation):

- Cook County, Ill., Department of Elections (1993)
- Marion County, Fla., Supervisor of Elections (1995)
- Berks County Clerk, Penn. (1995)
- Hamilton County, Ohio, Board of Elections (1997)
- Brevard County, Fla., Supervisor of Elections (1999)
- Osceola County, Fla., Supervisor of Elections (1999)
- Multnomah County, Ore, Elections Division (1999)
- Chatham County, Ga., Board of Elections (2000)
- City of Chicago, Ill., Board of Election Commissioners (2000)
- Mahoning County, Ohio, Board of Elections (2000)
- Iowa Secretary of State, Election and Voter Registrations Divisions (2001)
- Woodbury County, Iowa, Elections Department (2001)
- Franklin County, Ohio, Board of Elections (2001)
- Cobb County, Ga., Board of Elections and Voter Registration (2002)

Illinois State Board of Elections, Chicago Board of Election Commissioners, and Cook County Election Department: Detailed maps of congressional, legislative, judicial districts, 1992

Associated Press: Development of election night mapping system, 1994

## **Litigation Support**

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Activities include data analysis, preparation of court documents and expert witness testimony. Areas of expertise include the census, demographic databases, district compactness and contiguity, racial bloc voting, communities of interest, and voting systems. Redistricting litigation activities also include database construction and the preparation of substitute plans.

*Davidson, et al & ACLU of Rhode Island vs. City of Cranston, RI* (2014-16), city council & school committee redistricting with prisoner populations.

*Navaho Nation v. San Juan County, UT* (2014-17) county commissioner & school board districts.

*Michael Puyana vs. State of Rhode Island* (2012) state legislature redistricting

*United States of America v. Osceola County, Florida*, (2006), county commissioner districts.

*Deeds vs McDonnell* (2005), Va. Attorney General Recount

*Indiana Democratic Party, et al., v. Todd Rokita, et al.* (2005), voter identification.

*Linda Shade v. Maryland State Board of Elections* (2004), electronic voting systems

*Gongaley v. City of Aurora, Ill.* (2003), city council districts

*State of Indiana v. Sadler* (2003), ballot design (city of Indianapolis-Marion County, Ind.)



Kimball W. Brace, Vita, page 6

**(Litigation Support, cont.)**

*Peterson v. Borst* (2002–03), city-council districts (city of Indianapolis-Marion County, Ind.)

*New Rochelle Voter Defense Fund v. City of New Rochelle, City Council of New Rochelle, and Westchester County Board Of Elections* (2003), city council districts (New York)

*Charles Daniels and Eric Torres v. City of Milwaukee Common Council* (2003), council districts (Wisconsin)

*The Louisiana House of Representatives v. Ashcroft* (2002–03), state house districts

*Camacho v. Galvin and Black Political Caucus v. Galvin* (2002–03), state house districts (Massachusetts)

*Latino Voting Rights Committee of Rhode Island, et al., v. Edward S. Inman, III, et al.* (2002–03), state senate districts

*Metts, v. Harmon, Almond, and Harwood, et al.* (2002–03), state senate districts (Rhode Island)

*Joseph F. Parella, et al. v. William Irons, et al.* (2002–03), state senate districts (Rhode Island)

*Jackson v. County of Kankakee* (2001–02), county commissioner districts (Illinois)

*Corbett, et al., v. Sullivan, et al.* (2002), commissioner districts (St Louis County, Missouri)

*Harold Frank, et al., v. Forest County, et al.* (2001–02), county commissioner districts (Wisc.)

*Albert Gore, Jr., et al., v. Katherine Harris as Secretary of State, State of Florida, et al., and The Miami Dade County Canvassing Board, et al., and The Nassau County Canvassing Board, et al., and The Palm Beach County Canvassing Board, et al., and George W. Bush, et al* (2000), voting equipment design — Leon County, Fla., Circuit Court hearing, December 2, 2000, on disputed ballots in Broward, Volusia, Miami-Dade, and Palm Beach counties from the November 7, 2000, presidential election.

*Barnett v. Daley/PACI v. Daley/Bonilla v. Chicago City Council* (1992–98), city wards

*Donald Moon, et al. v. M. Bruce Meadows, etc and Curtis W. Harris, et al.* (1996–98), congressional districts (Virginia)

*Melvin R. Simpson, et al. v. City of Hampton, et al.* (1996–97), city council districts (Va.)

*Vera vs. Bush* (1996), Texas redistricting

*In the Matter of the Redistricting of Shawnee County Kansas and Kingman, et al. v. Board of County Commissioners of Shawnee County, Kansas* (1996), commissioner districts

*Vecinos de Barrio Uno v. City of Holyoke* (1992–96), city council districts (Massachusetts)

*Torres v. Cuomo* (1992–95), congressional districts (New York)

*DeGrandy v. Wetherell* (1992–94), congressional, senate, and house districts (Florida)

*Johnson v. Miller* (1994), congressional districts (Georgia)

*Jackson, et al v Nassau County Board of Supervisors* (1993), form of government (N.Y.)

*Gonzalez v. Monterey County, California* (1992), county board districts



Kimball W. Brace, Vita, page 7

**(Litigation Support, cont.)**

*LaPaille v. Illinois Legislative Redistricting Commission* (1992), senate and house districts  
*Black Political Task Force v. Connolly* (1992), senate and house districts (Massachusetts)  
*Nash v. Blunt* (1992), house districts (Missouri)  
*Fund for Accurate and Informed Representation v. Weprin* (1992), assembly districts (N.Y.)  
*Mellow v. Mitchell* (1992), congressional districts (Pennsylvania)  
*Phillip Langsdon v. Milsaps* (1992), house districts (Tennessee)  
*Smith v. Board of Supervisors of Brunswick County* (1992), supervisor districts (Virginia)  
*People of the State of Illinois ex. rel. Burris v. Ryan* (1991–92), senate and house districts  
*Good v. Austin* (1991–92), congressional districts (Michigan)  
*Neff v. Austin* (1991–92), senate and house districts (Michigan)  
*Hastert v. Illinois State Board of Elections* (1991), congressional districts  
*Republican Party of Virginia et al. v. Wilder* (1991), senate and house districts  
*Jamerson et al. v. Anderson* (1991), senate districts (Virginia)  
*Ralph Brown v. Iowa Legislative Services Bureau* (1991), redistricting database access  
*Williams, et al. v. State Board of Election* (1989), judicial districts (Cook County, Ill.)  
*Fifth Ward Precinct 1A Coalition and Progressive Association v. Jefferson Parish School Board* (1988–89), school board districts (Louisiana)  
*Michael V. Roberts v. Jerry Wamser* (1987–89), St. Louis, Mo., voting equipment  
*Brown v. Board of Commissioners of the City of Chattanooga, Tenn.* (1988), county commissioner districts  
*Business Records Corporation v. Ransom F. Shoup & Co., Inc.* (1988), voting equip. patent  
*East Jefferson Coalition for Leadership v. The Parish of Jefferson* (1987–88), parish council districts (Louisiana)  
*Buckanaga v. Sisseton School District* (1987–88), school board districts (South Dakota)  
*Griffin v. City of Providence* (1986–87), city council districts (Rhode Island)  
*United States of America v. City of Los Angeles* (1986), city council districts  
*Latino Political Action Committee v. City of Boston* (1984–85), city council districts  
*Ketchum v. Byrne* (1982–85), city council districts (Chicago, Ill.)  
*State of South Carolina v. United States* (1983–84), senate districts — U.S. Dept. of Justice  
*Collins v. City of Norfolk* (1983–84), city council districts (Virginia) — for Lawyers' Committee for Civil Rights  
*Rybicki v. State Board of Elections* (1981–83), senate and house districts (Illinois)  
*Licht v. State of Rhode Island* (1982–83), senate districts (Rhode Island)



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**(Litigation Support, cont.)**

*Agerstrand v. Austin* (1982), congressional districts (Michigan)

*Farnum v. State of Rhode Island* (1982), senate districts (Rhode Island)

*In Re Illinois Congressional District Reapportionment Cases* (1981), congressional districts

**Publications**

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"EAC Survey Sheds Light on Election Administration", *Roll Call*, October 27, 2005 (with Michael McDonald)

*Developing a Statewide Voter Registration Database: Procedures, Alternatives, and General Models*, by Kimball W. Brace and M. Glenn Newkirk, edited by William Kimberling, (Washington, D.C.: Federal Election Commission, Office of Election Administration, Autumn 1997).

*The Election Data Book: A Statistical Portrait of Voting in America*, 1992, Kimball W. Brace, ed., (Bernan Press, 1993)

"Geographic Compactness and Redistricting: Have We Gone Too Far?", presented to Midwestern Political Science Association, April 1993 (with D. Chapin and R. Niemi)

"Whose Data is it Anyway: Conflicts between Freedom of Information and Trade Secret Protection in Redistricting", *Stetson University Law Review*, Spring 1992 (with D. Chapin and W. Arden)

"Numbers, Colors, and Shapes in Redistricting," *State Government News*, December 1991 (with D. Chapin)

"Redistricting Roulette," *Campaigns and Elections*, March 1991 (with D. Chapin)

"Redistricting Guidelines: A Summary", presented to the Reapportionment Task Force, National Conference on State Legislatures, November 9, 1990 (with D. Chapin and J. Waliszewski)

"The 65 Percent Rule in Legislative Districting for Racial Minorities: The Mathematics of Minority Voting Equality," *Law and Policy*, January 1988 (with B. Grofman, L. Handley, and R. Niemi)

"Does Redistricting Aimed to Help Blacks Necessarily Help Republicans?" *Journal of Politics*, February 1987 (with B. Grofman and L. Handley)

"New Census Tools," *American Demographics*, July/August 1980

**Professional Activities**

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Member, Task Force on Long Lines in 2012 Election, Prince William County, VA

Member, 2010 Census Advisory Committee, a 20-member panel advising the Director of the Census on the planning and administration of the 2010 census.

Kimball W. Brace, Vita, page 9

**(Professional Activities, cont.)**

Delegate, Second Trilateral Conference on Electoral Systems (Canada, Mexico, and United States), Ontario, Canada, 1995; and Third Trilateral Conference on Electoral Systems, Washington, D.C., 1996

Member, American Association of Political Consultants

Member, American Association for Public Opinion Research

Member, American Political Science Association

Member, Association of American Geographers, Census Advisory Committee

Member Board of Directors, Association of Public Data Users

Member, National Center for Policy Alternatives, Voter Participation Advisory Committee

Member, Urban and Regional Information Systems Association

**Historical Activities**

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Member, Manassas Battlefield Trust Board Member, 2018 -- current

Member, Historical Commission, Prince William County, VA., 2015 – current. Elected Chairman in 2017, re-elected 2018

Member of Executive Committee & head of GIS Committee, Bull Run Civil War Round Table, Centerville, VA. 2015 – current

Member, Washington Capitals Fan Club, Executive Board 2017 -- current

January - 2018

# EXHIBIT 2





6171 Emerywood Court  
Manassas, Virginia 20112

202 789.2004 tel. or  
703 580.7267  
703 580.6258 fax  
[Info@electiondataservices.com](mailto:Info@electiondataservices.com)

## FOR IMMEDIATE RELEASE

Date: December 26, 2017  
Contact: Kimball W. Brace

Tel.: (202) 789-2004 or (703) 580-7267  
Email: [kbrace@electiondataservices.com](mailto:kbrace@electiondataservices.com)  
Website: [www.electiondataservices.com](http://www.electiondataservices.com)

*NOTE: An inadvertent error in the trend line methodology calculations caused population projections for 2020 to be too high in the study released December 20, 2017. As a result, this caused changes in two seats affecting four states using the short-term methodology (2016-2017) and one seat affecting two states using the middle-term methodology. There were no changes in seat allocations using the long-term methodology, although seat positioning (seen in "last seat given" and "next seat at" columns) were affected in all three methodologies. The below press release, tables, and maps have been updated to reflect these corrections. We regret the error but pleasantly acknowledge the contribution of one reader who found the issue.*

## Some Change in Apportionment Allocations With New 2017 Census Estimates; But Greater Change Likely by 2020

New Census Bureau population estimates for 2017 released today shows a change of two more seats between four states from last year's study generated by Election Data Services, Inc. on which states would gain or lose congressional seats if the current numbers were used for apportionment in 2017. But projecting these numbers to 2020, using several different methods, leads to more states being impacted by the decennial census scheduled to take place in just three years.

The Bureau's 2017 total population estimates shows that now 12 states will be impacted by changes in their congressional delegation if these new numbers were used for apportionment today. The state of **Colorado** joins the previously indicated states of **Florida**, **North Carolina**, and **Oregon** to each gain a single seat while the state of **Texas** is now shown to gain a second seat with the new data. The states of **New York** and **West Virginia** joins the states of **Illinois**, **Michigan**, **Minnesota** and **Pennsylvania** to lose a seat in Congress using the new data.

The new numbers, however, reflect subtle changes taking place across the nation in birth and death rates and resulting total population numbers that become magnified when the information is projected forward to coincide with the taking of the 2020 Census on April 1 that year. Election Data Services created three different methodologies to project the 2017 data forward nearly three years to 2020 (a short-term projection method for the trend occurring in 2016-2017, a middle term methodology using the 2014-2017 trend, and a long-term projection for 2010-2017). All three methodologies added the state of **Arizona**, along with a second seat for **Florida** and maybe a third seat for **Texas**, to the list of states noted above that will gain one or more seats by 2020. The list of losing states will expand to also include **Alabama**, **Ohio**, and **Rhode Island** by the time the Census is taken in 2020.



The three methodologies diverge at one important point, whether **Montana** will gain a second seat and keep **Texas** from obtaining a third additional seat. The long-term and mid-term methodologies show **Texas** would gain three seats by 2020 and **Montana** would stay at a single at-large seat. But the short-term methodology points towards **Texas** having only two additional seats and the state of **Montana** securing seat #434 (its second seat) by just 2,493 people to spare.

The projections show that the state of **California** is very close to actually losing a congressional seat in 2020, the first time that state will have lost a seat in its nearly 160-year history. For the last several decades California's population growth has been relatively flat when compared to other states. While the state gained seven congressional districts between 1980 and 1990, it gained only one district the following decade and no additional seats between 2000 and 2010. All three projection methodologies for 2020 found **California** receiving seat #435 or #434, just before the cut-off, with the short-term methodology (2016-2017) finding the state kept its 53<sup>rd</sup> seat with just 75,770 people to spare. The most recent destructive fires in Napa and Ventura counties occurred after the date associated with the Census estimates, so their impact won't be felt until the 2018 estimates are released.

All three projection methodologies show the state of **Illinois** as losing a single district by 2020. But the state is dangerously close to losing a second seat, which it currently keeps by obtaining seat #432 or #433 with between 103,000 and 191,000 people to spare depending on the methodology utilized.

For much of this decade the state of **Minnesota** is shown to be on the losing side of congressional representation. The 2017 population estimates confirm this, when the state comes up 30,477 short of keeping its 8<sup>th</sup> seat, and on the wrong side of the magic 435 mark at seat #437. All three projection methodologies also find the state losing a seat, but the short-term methodology projection puts **Minnesota** at seat #436 and only 10,801 away from obtaining that seat. It is likely the state will continue to be on the representation bubble.

Using either methodology the population projections point toward an eight (8) to ten (10) seat change over 15 to 16 states across the nation come 2020. States that will gain single seats include **Arizona**, **Colorado**, **North Carolina**, and **Oregon** and maybe **Montana**, while **Florida** is set to gain two congressional districts and **Texas** could gain two or three seats. Single seat losses will again occur in the Midwest and Northeast sections of the nation, where **Alabama**, **Illinois**, **Michigan**, **New York**, **Ohio**, **Pennsylvania**, **Rhode Island** and **West Virginia**, as well as possibly **Minnesota** would each lose a seat. All other states would keep the same number of representatives they were awarded in December 2010 when the official 2010 Census numbers were released.

Using the new sets of projected 2020 data, the apportionment calculations show that 15 to 16 states could gain or lose 8 to 10 districts by the time the Census is taken in 2020. The gainers and losers are:



**States Gaining Districts (7)**

**Arizona** +1 (from 9 to 10)  
**Colorado** +1 (from 7 to 8)  
**Florida** +2 (from 27 to 29)  
**Montana** even or +1 (from At-large to 2)  
**North Carolina** +1 (from 13 to 14)  
**Oregon** +1 (from 5 to 6)  
**Texas** +2 or +3 (from 36 to 38 or 39)

**States Losing Districts (8 or 9)**

**Alabama** -1 (from 7 to 6)  
**Illinois** -1 (from 18 to 17)  
**Michigan** -1 (from 14 to 13)  
**Minnesota** -1 or even (from 8 to 7 or no change)  
**New York** -1 (from 27 to 26)  
**Ohio** -1 (from 16 to 15)  
**Pennsylvania** -1 (from 18 to 17)  
**Rhode Island** -1 (from 2 to 1)  
**West Virginia** -1 (from 3 to 2)

The Census Bureau's press release accompanying the December 20<sup>th</sup>, 2017 release of the population estimates notes that **Idaho** is the nation's fastest growing state in the past year, followed by **Nevada** and **Utah**. But this population growth has not impacted these state's congressional allocation, at least not yet. The 2017 numbers show **Idaho** would stay at two seats, and miss gaining an additional seat by 118,406 people. But projecting the numbers forward to 2020 using the short-term methodology shows **Idaho** only 55,054 away from gaining a third seat. All the population projection methodologies keep the state of **Nevada** at four seats and sufficiently away from any margins of a fifth possible seat. **Utah** is similar in that it would take more than 161,000 extra people for the state to gain a fifth district.

Since 1941, by law the number of seats in the U.S. House of Representatives has been capped at 435. As a result, there has always been interest in finding which states are close to that magic bubble, either just gaining their last seat, or just missing their next seat. The following table shows the results of the 2017 population estimates, as well as the short-term trend methodology calculations for the seats within five positions of the 435 cut off.

**2017 Reapportionment Analysis****2017 Population Estimates**

<b>Last Five Seats</b>	<b>Margin of Gain</b>
431 California (53rd)	207,155
432 Ohio (16th)	52,560
433 Alabama (7th)	19,589
434 Colorado (8 <sup>th</sup> )	900
435 Rhode Island (2nd)	157

<b>Next Seats</b>	<b>Margin of Loss</b>
436 New York (27 <sup>th</sup> )	2,932
437 Minnesota (8th)	30,477
438 Montana (2 <sup>nd</sup> )	?
439 West Virginia (3rd)	19,492
440 Arizona (10th)	92,005

**2020 Projections****(using 2016-2017 short-term trend)**

<b>Last Five Seats</b>	<b>Margin of Gain</b>
431 Arizona (10th)	65,805
432 Illinois (17 <sup>th</sup> )	103,961
433 Florida (29th)	120,188
434 Montana (2nd)	2,493
435 California (53rd)	75,770

<b>Next Seats</b>	<b>Margin of Loss</b>
436 Minnesota (8th)	10,801
437 Texas (39th)	60,103
438 Ohio (16th)	105,213
439 Alabama (7th)	48,850
440 Rhode Island (2nd)	?



Election Data Services, Inc. "2017 Reapportionment Analysis"

December 26, 2017

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Kimball Brace, President of Election Data Services, Inc. cautioned users to take the projections as very preliminary and subject to change. "The change in administration and the lack of a Census Director could have a profound impact on how well the 2020 Census is conducted, and therefore the counts that are available for apportionment," Brace noted. "Having worked with Census data and estimates since the 1970s, it is important to remember that major events like Katrina and the 2008 recession each changed population growth patterns and that impacted and changed the next apportionment," he said.

Brace also noted that major changes in the counting process are in the works for 2020 and that reduced budget funding could impact those plans. "History can also be a guide, recalling that the 1920 apportionment was cancelled because the numbers showed for the first time that more people resided in urban areas than rural areas" said Brace.

The new 2017 estimates also point to how close a number of states stand to gain or lose a district. Most notable are the states of:

**Rhode Island** – While keeping their two congressional districts with the 2017 numbers, the new data shows the state is now only 157 people away from dropping to a single district state. This has steadily decreased over the decade so far. Last year the state was 5,569 people away from losing its' second seat, and in 2015 the margin was 16,130 and in 2014 they kept the second seat by only 21,389 in population. The 2010 Census gave **Rhode Island** their second seat but with only 52,481 people to spare. At this rate, they will be down to just one district in the next several years, the first time this has occurred to **Rhode Island** since 1789 when the nation was formed. This is confirmed in the 2020 study data. They would join six or seven other states that also just have a single representative in the US House (**Alaska, Delaware, Montana, North Dakota, South Dakota, Vermont** and **Wyoming**). Note that one projection method shows **Montana** gaining a second seat.

**Montana** – The state is at the cusp of possibly gaining back its second seat in Congress, something it held from 1910 through 1980. The state dropped to a single seat in the House of Representatives from 1990 to the current time. The long-term (2010-2017) and mid-change methodology (2014-2017) showed the state at seat #436, just missing an additional seat. But, the short-term methodology (2016-2017) gives Montana it's second seat with just 2,493 people to spare.

Because congressional apportionment also impacts the Electoral College and the vote for President, Election Data Services took the 2020 projections for each state and applied the Presidential election results from the past five Presidential contests to determine the Electoral College outcomes in the past 16 years. The study shows that none of the presidential contests would have elected a different presidential candidate using the new apportionment counts but they would have been more Republican in nature. For example, in 2016 President Trump would have gained an additional electoral college vote under the new apportionment projections. In 2012 President Obama would still have won the Electoral College, but with four less votes (328 vs 332) that he won at the time of the voting. The biggest change would have occurred in the 2000 presidential election where George Bush would have gained an additional 19 electoral votes had the new 2020 apportionment projections determined the number of congressional seats in each state.



Election Data Services, Inc. "2017 Reapportionment Analysis"

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The 2016 Electoral College was muddled because 7 electors voted for a different candidate than what they had pledged based on the vote totals. As a result, the overall change in candidate votes based on the new apportionment numbers shows just one vote difference in the bottom line results. President elect Trump's ability to carry states that will be losing congressional seats in 2020 also contributed to a reversal of the pattern depicted in previous elections.

It should be noted that the 2020 Presidential election and resulting electoral college will occur before the results of the 2020 Census are released by December 31, 2020. Therefore, the electoral college results in 2020 will be governed by the state's apportionment allocation as they exist today, having been first determined in 2011. The first time the new 2020 apportionment results will be utilized will be the 2024 Presidential election. Election Data Services, Inc. has also worked with the website [270ToWin](#), who has built an interactive map of these new apportionment results where users can adjust state outcomes to discover electoral college outcomes for the presidential elections back to 2000.

Major weather events have also affected apportionment. The Census Bureau's estimated populations released for 2005 showed Louisiana would keep all their congressional districts that decade. Even the Bureau's own projections for 2010 released that same year showed Louisiana staying the same. Then hurricane Katrina hit Louisiana at the end of August 2005 (after the date of the population estimates). Devastation and population loss impacted New Orleans in a major way, and when the Bureau's 2006 population estimates were released Louisiana was looking at losing a congressional seat. That was ultimately confirmed when the 2010 Census was taken, and state data was released at the end of that year.

The year of 2017 saw 18 hurricanes and tropical storms, three of which have the potential of impacting population movements in the US. However, all three significant storms (Harvey (affecting Houston area), Irma (impacting Miami and the Florida Gulf Coast), and Maria (which devastated Puerto Rico)) occurred in August and September 2017, after the date of coverage for the Census Bureau's population estimates released today. "It won't be until next year when we see whether population lost in Houston was enough to keep Texas at gaining only two districts instead of three," noted Brace. "And while Irma may have cut down some population in Florida, Maria's wide-spread and on-going impact in Puerto Rico has reportedly led to more than a quarter million American citizens to move to Florida, mainly in the center of the state," Brace said. The 2017 study released today showed Florida missed gaining a 29th seat by only 366,735 people. It won't be until the 2018 estimates are released next year that the storm's impact will be seen in the numbers.

The 2017 population estimates have not been statistically adjusted for any known undercount. In addition, no estimates were provided for U.S. military personnel overseas. This component has in the past been counted by the Census Bureau and allocated to the states. Overseas military personnel have been a factor in the apportionment formula for the past several decades, including the switching of the final district in 2000 that went from **Utah** to **North Carolina**. Observers are also awaiting the Census Bureau's and/or Trump administration's release of the "residency rules" that will dictate where college students, the military, and prisoners will be counted in the 2020 census, which in turn could impact the apportionment process. The lack of a Census Director could also have an impact on how well the Census is conducted, and therefore the quality of the apportionment numbers.

Election Data Services, Inc. "2017 Reapportionment Analysis"

December 26, 2017

Page 6 of 6

Past apportionment studies by Election Data Services, Inc. can be found at <https://www.electiondataservices.com/reapportionment-studies/>. A historical chart on the number of districts each state received each decade from 1789 to current is also available at this web address and linkable at <https://www.electiondataservices.com/wp-content/uploads/2014/10/CD-apportionment-1789-2010.pdf>.

Election Data Services Inc. is a political consulting firm that specializes in redistricting, election administration, and the analysis of census and political data. Election Data Services, Inc. conducts the congressional apportionment analyses with each annual release of the census population estimates. For more information about the reapportionment analysis, contact Kimball Brace (703-580-7267 or 202-789-2004 or [kbrace@electiondataservices.com](mailto:kbrace@electiondataservices.com)).



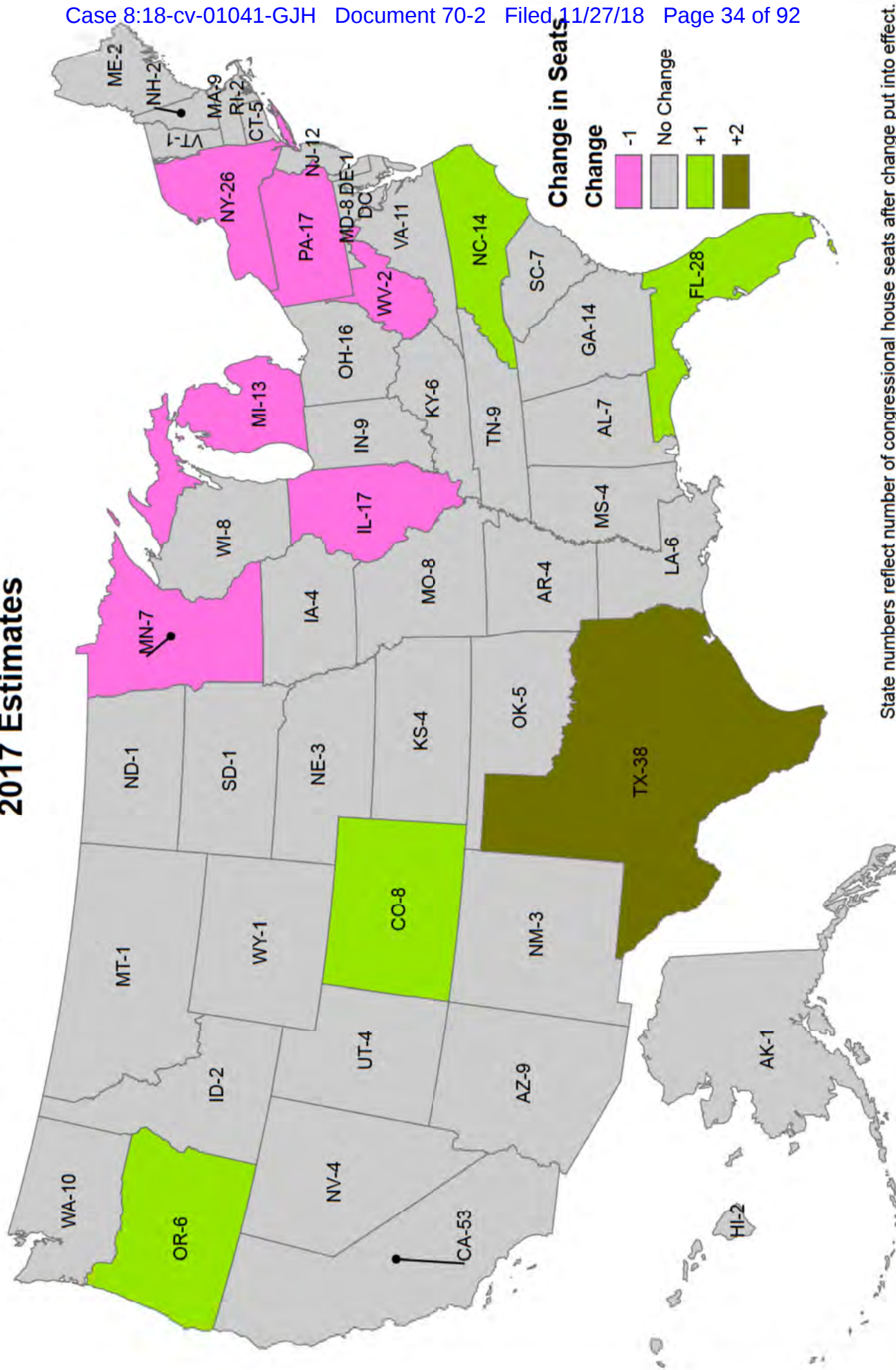
apportionment2017CBEstimatesC1.xls

2017 Population Estimates, Generated by Census Bureau 12/20/2017, with No Military Population Over										
State	Population	Compare To	Seats	Change	Gain a Seat	Lose a Seat	Last Seat Given	Next Seat At	Average Size	Size Rank
Alabama	4,874,747	7	7	0	732,336	19,589	433	502	696,392	42
Alaska	739,795	1	1	0			at large	626	739,795	33
Arizona	7,016,270	9	9	0	92,005	659,375	394	440	779,586	10
Arkansas	3,004,279	4	4	0	346,594	409,088	377	484	751,070	21
California	39,536,653	53	53	0	547,966	207,155	431	441	745,975	27
Colorado	5,607,154	7	8	1	750,680	900	434	495	700,894	41
Connecticut	3,588,184	5	5	0	515,781	237,807	408	499	717,637	39
Delaware	961,939	1	1	0			at large	479	961,939	2
Florida	20,984,400	27	28	1	366,735	385,706	427	444	749,443	24
Georgia	10,429,379	14	14	0	428,690	322,560	425	454	744,956	28
Hawaii	1,427,538	2	2	0	407,811	368,056	327	560	713,769	40
Idaho	1,716,943	2	2	0	118,406	657,461	276	466	858,472	5
Illinois	12,802,023	18	17	-1	304,988	446,440	421	447	753,060	20
Indiana	6,666,818	9	9	0	441,457	309,923	414	465	740,758	31
Iowa	3,145,711	4	4	0	205,162	550,520	358	464	786,428	7
Kansas	2,913,123	4	4	0	437,750	317,932	391	503	728,281	36
Kentucky	4,454,189	6	6	0	401,687	350,831	402	476	742,365	30
Louisiana	4,684,333	6	6	0	171,543	580,975	386	450	780,722	9
Maine	1,335,907	2	2	0	499,442	276,425	345	597	667,954	46
Maryland	6,052,177	8	8	0	305,657	445,923	404	457	756,522	17
Massachusetts	6,859,819	9	9	0	248,456	502,924	405	449	762,202	16
Michigan	9,962,311	14	13	-1	146,001	605,215	410	442	766,332	13
Minnesota	5,576,606	8	7	-1	30,477	721,448	383	437	796,658	6
Mississippi	2,984,100	4	4	0	366,773	388,909	382	489	746,025	26
Missouri	6,113,532	8	8	0	244,302	507,278	400	453	764,192	14
Montana	1,050,493	1	1	0			at large	438	1,050,493	1
Nebraska	1,920,076	3	3	0	675,499	84,999	415	583	640,025	47
Nevada	2,998,039	4	4	0	352,834	402,848	379	486	749,510	23
New Hampshire	1,342,795	2	2	0	492,554	283,313	341	593	671,398	45
New Jersey	9,005,644	12	12	0	352,835	398,368	416	452	750,470	22
New Mexico	2,088,070	3	3	0	507,505	252,993	387	539	696,023	43
New York	19,849,399	27	26	-1	2,932	749,306	419	436	763,438	15
North Carolina	10,273,419	13	14	1	584,650	166,600	428	460	733,816	34
North Dakota	755,393	1	1	0			at large	611	755,393	18
Ohio	11,658,609	16	16	0	698,800	52,560	432	462	728,663	35
Oklahoma	3,930,864	5	5	0	173,101	580,487	373	455	786,173	8
Oregon	4,142,776	5	6	1	713,100	39,418	429	512	690,463	44
Pennsylvania	12,805,537	18	17	-1	301,474	449,954	420	446	753,267	19
Rhode Island	1,059,639	2	2	0	775,710	157	435	736	529,820	50
South Carolina	5,024,369	7	7	0	582,714	169,211	423	485	717,767	38
South Dakota	869,666	1	1	0			at large	529	869,666	4
Tennessee	6,715,984	9	9	0	392,291	359,089	413	461	746,220	25
Texas	28,304,596	36	38	2	540,172	213,321	430	445	744,858	29
Utah	3,101,833	4	4	0	249,040	506,642	362	470	775,458	11
Vermont	623,657	1	1	0			at large	723	623,657	48
Virginia	8,470,020	11	11	0	138,528	612,688	406	443	770,002	12
Washington	7,405,743	10	10	0	452,751	298,519	418	463	740,574	32
West Virginia	1,815,857	3	2	-1	19,492	756,375	256	439	907,929	3
Wisconsin	5,795,483	8	8	0	562,351	189,229	424	477	724,435	37
Wyoming	579,315	1	1	0			at large	771	579,315	49
Washington DC	693,972	0								
Other Inputs:	325,719,178		435					Median =	746,123	
	Seats to Apportion							Min =	529,820	
	435: Max Seats to Calculate							Max =	1,050,493	
	75: States									
	50									
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# Anticipated Gains/Losses in Reapportionment

2017 Estimates





apportionment2020ProjectionsOn2016\_2017ChangeIn2017CBEstimatesC2.xls

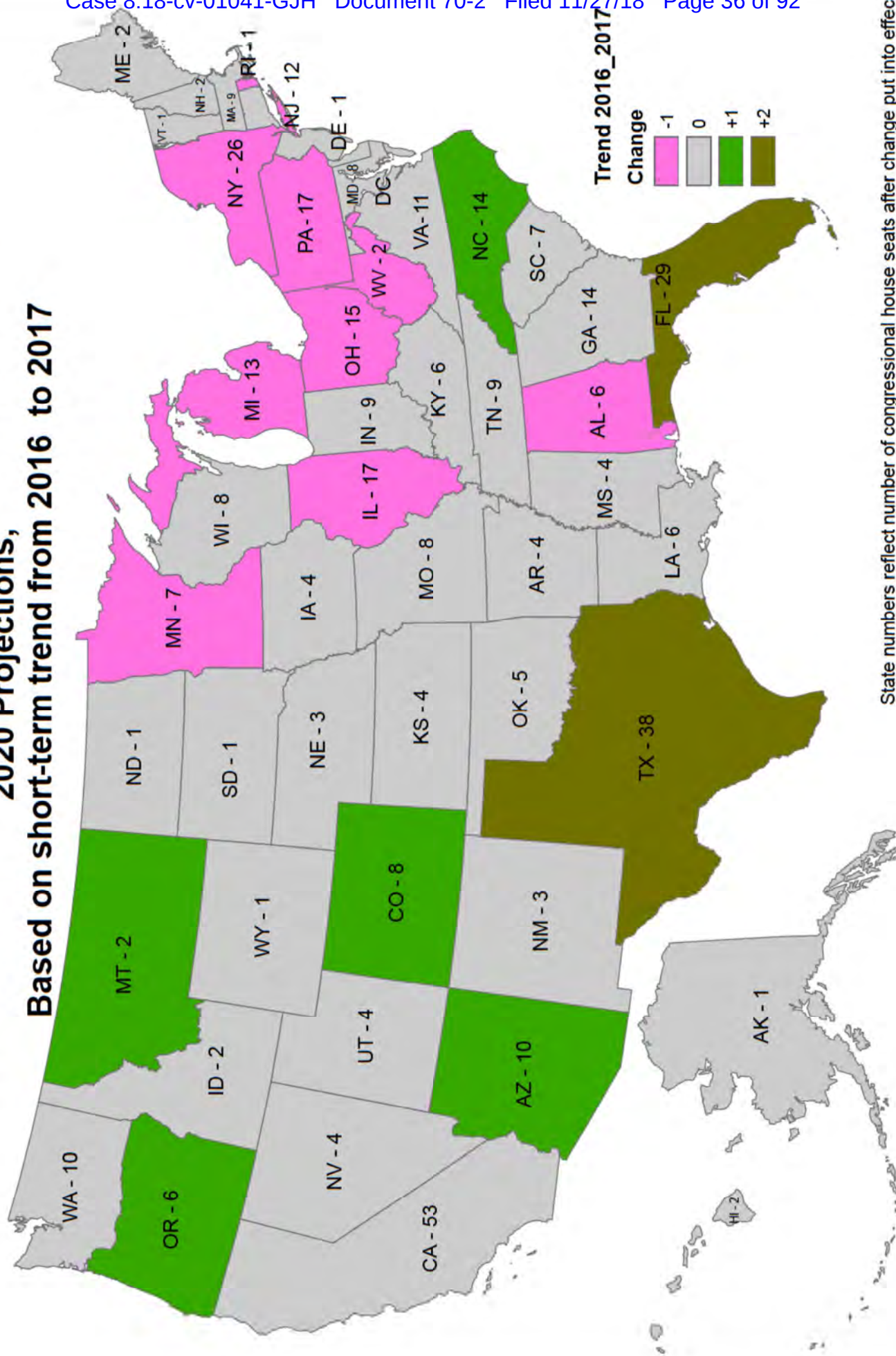
2020 Projections based on 2016-2017 Change in 2017 Population Estimates, Generated by Census Bureau 12/20/2017, with No Military Population

State	Population	Compare To	Seats	Change	Gain a Seat	Lose a Seat	Last Seat Given	Next Seat At	Average Size	Size Rank
Alabama	4,913,917	7	6	-1	48,850	727,520	373	439	818,986	6
Alaska	735,057	1	1	0			at large	637	735,057	36
Arizona	7,316,858	9	10	1	714,621	65,805	431	476	731,686	39
Arkansas	3,048,648	4	4	0	375,986	400,938	380	490	762,162	24
California	40,201,177	53	53	0	765,806	75,770	435	441	758,513	25
Colorado	5,821,991	7	8	1	675,796	102,283	430	488	727,749	40
Connecticut	3,589,556	5	5	0	604,747	171,378	416	507	717,911	41
Delaware	987,598	1	1	0			at large	474	987,598	2
Florida	21,900,186	27	29	2	686,826	120,188	433	447	755,179	29
Georgia	10,751,289	14	14	0	345,794	439,940	418	448	767,949	20
Hawaii	1,424,392	2	2	0	451,358	343,469	334	571	712,196	43
Idaho	1,820,696	2	2	0	55,054	739,773	262	446	910,348	3
Illinois	12,709,583	18	17	-1	685,946	103,961	432	459	747,623	33
Indiana	6,757,495	9	9	0	507,252	271,956	420	469	750,833	31
Iowa	3,186,720	4	4	0	237,914	539,010	364	468	796,680	9
Kansas	2,927,978	4	4	0	496,656	280,269	397	508	731,995	38
Kentucky	4,504,101	6	6	0	458,666	317,703	403	480	750,683	32
Louisiana	4,679,319	6	6	0	283,448	492,922	392	465	779,886	14
Maine	1,351,580	2	2	0	524,170	270,657	347	601	675,790	46
Maryland	6,127,939	8	8	0	369,847	408,232	407	464	765,992	22
Massachusetts	6,959,614	9	9	0	305,132	474,075	406	452	773,290	17
Michigan	10,041,923	14	13	-1	288,899	495,468	414	445	772,456	18
Minnesota	5,719,708	8	7	-1	10,801	766,296	379	436	817,101	7
Mississippi	2,980,485	4	4	0	444,149	332,776	389	499	745,121	34
Missouri	6,175,237	8	8	0	322,550	455,529	402	455	771,905	19
Montana	1,083,416	1	2	1	792,334	2,493	434	737	541,708	50
Nebraska	1,954,601	3	3	0	698,110	82,388	417	587	651,534	47
Nevada	3,162,931	4	4	0	261,704	515,221	366	472	790,733	11
New Hampshire	1,364,315	2	2	0	511,435	283,392	342	593	682,157	45
New Jersey	9,080,748	12	12	0	483,734	299,287	422	458	756,729	27
New Mexico	2,095,334	3	3	0	557,377	223,120	391	548	698,445	44
New York	19,885,484	27	26	-1	403,847	398,864	428	443	764,826	23
North Carolina	10,598,116	13	14	1	498,967	286,766	423	453	757,008	26
North Dakota	754,967	1	1	0			at large	624	754,967	30
Ohio	11,758,068	16	15	-1	105,213	681,901	412	438	783,871	13
Oklahoma	3,957,486	5	5	0	236,817	539,307	376	463	791,497	10
Oregon	4,301,111	5	6	1	661,656	114,714	424	501	716,852	42
Pennsylvania	12,856,353	18	17	-1	539,176	250,731	429	451	756,256	28
Rhode Island	1,065,351	2	1	-1			at large	440	1,065,351	1
South Carolina	5,204,183	7	7	0	526,326	250,771	415	477	743,455	35
South Dakota	892,218	1	1	0			at large	528	892,218	4
Tennessee	6,900,912	9	9	0	363,834	415,374	409	456	766,768	21
Texas	29,419,611	36	38	2	60,103	759,855	425	437	774,200	16
Utah	3,262,979	4	4	0	161,656	615,269	354	454	815,745	8
Vermont	624,491	1	1	0			at large	738	624,491	48
Virginia	8,624,042	11	11	0	174,003	607,701	404	442	784,004	12
Washington	7,754,851	10	10	0	276,628	503,798	408	449	775,485	15
West Virginia	1,780,958	3	2	-1	94,792	700,035	269	457	890,479	5
Wisconsin	5,857,782	8	8	0	640,004	138,075	426	485	732,223	37
Wyoming	564,076	1	1	0			at large	805	564,076	49
Washington DC	720,844	0								
Other Inputs:	332,158,271		435					Median =	757,76	
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	435 Max Seats to Calculate							Max =	1,065,35	
	75 States									
	50									
<input type="checkbox"/>	Include Washington									



# Anticipated Gains/Losses in Reapportionment

2020 Projections,  
Based on short-term trend from 2016 to 2017





apportionment2020ProjectionsOn2014\_2017ChangeIn2017CBEstimatesC2.xls

2020 Projections based on 2014-2017 Change in 2017 Population Estimates, Generated by Census Bureau 12/20/2017, with No Military Population

State	Population	Compare To	Seats	Change	Gain a Seat	Lose a Seat	Last Seat Given	Next Seat At	Average Size	Size Rank
Alabama	4,906,793	7	6	-1	70,512	726,498	374	438	817,799	7
Alaska	742,589	1	1	0			at large	631	742,589	37
Arizona	7,313,407	9	10	1	741,600	72,923	433	477	731,341	40
Arkansas	3,040,950	4	4	0	393,717	397,100	382	491	760,237	26
California	40,318,943	53	53	0	768,049	252,024	435	440	760,735	25
Colorado	5,861,962	7	8	1	654,859	150,592	426	483	732,745	38
Connecticut	3,577,217	5	5	0	629,373	164,021	417	511	715,443	44
Delaware	987,534	1	1	0			at large	476	987,534	3
Florida	22,034,897	27	29	2	618,282	286,646	431	445	759,824	27
Georgia	10,756,967	14	14	0	372,624	460,647	420	446	768,355	21
Hawaii	1,436,609	2	2	0	444,635	357,262	332	565	718,305	43
Idaho	1,800,494	2	2	0	80,750	721,147	264	450	900,247	4
Illinois	12,728,769	18	17	-1	706,001	141,522	432	458	748,751	33
Indiana	6,735,072	9	9	0	550,956	258,986	421	471	748,341	34
Iowa	3,182,989	4	4	0	251,677	539,139	364	469	795,747	11
Kansas	2,925,620	4	4	0	509,046	281,770	397	509	731,405	39
Kentucky	4,494,713	6	6	0	482,591	314,419	405	481	749,119	32
Louisiana	4,717,157	6	6	0	260,148	536,862	390	457	786,193	13
Maine	1,342,361	2	2	0	538,883	263,014	350	607	671,181	47
Maryland	6,128,312	8	8	0	388,509	416,942	407	466	766,039	23
Massachusetts	6,954,630	9	9	0	331,397	478,545	406	451	772,737	17
Michigan	10,006,187	14	13	-1	354,898	473,647	416	447	769,707	20
Minnesota	5,692,816	8	7	-1	54,480	746,625	380	437	813,259	9
Mississippi	2,980,001	4	4	0	454,665	336,151	391	500	745,000	35
Missouri	6,164,890	8	8	0	351,931	453,520	402	460	770,611	19
Montana	1,079,348	1	1	0			at large	436	1,079,348	1
Nebraska	1,956,716	3	3	0	703,765	87,232	418	587	652,239	48
Nevada	3,159,442	4	4	0	275,224	515,592	366	472	789,861	12
New Hampshire	1,355,867	2	2	0	525,377	276,520	344	599	677,934	46
New Jersey	9,063,461	12	12	0	529,040	294,799	423	462	755,288	30
New Mexico	2,092,538	3	3	0	567,943	223,054	393	549	697,513	45
New York	19,919,166	27	26	-1	429,600	460,951	428	442	766,122	22
North Carolina	10,588,169	13	14	1	541,421	291,850	425	454	756,298	29
North Dakota	771,081	1	1	0			at large	610	771,081	18
Ohio	11,718,404	16	15	-1	179,629	658,382	413	439	781,227	15
Oklahoma	3,982,803	5	5	0	223,787	569,607	375	459	796,561	10
Oregon	4,317,379	5	6	1	659,926	137,084	424	501	719,563	42
Pennsylvania	12,819,483	18	17	-1	615,287	232,235	430	452	754,087	31
Rhode Island	1,064,112	2	1	-1			at large	441	1,064,112	2
South Carolina	5,214,916	7	7	0	532,380	268,724	414	478	744,988	36
South Dakota	888,634	1	1	0			at large	529	888,634	6
Tennessee	6,881,637	9	9	0	404,391	405,551	412	463	764,626	24
Texas	29,604,237	36	39	3	729,913	222,975	434	444	759,083	28
Utah	3,259,702	4	4	0	174,964	615,852	354	456	814,926	8
Vermont	621,822	1	1	0			at large	738	621,822	49
Virginia	8,612,962	11	11	0	210,855	608,306	404	443	782,997	14
Washington	7,751,401	10	10	0	303,605	510,918	408	449	775,140	16
West Virginia	1,787,238	3	2	-1	94,007	707,891	268	455	893,619	5
Wisconsin	5,836,321	8	8	0	680,500	124,951	429	488	729,540	41
Wyoming	575,656	1	1	0			at large	791	575,656	50
Washington DC	725,909	0								
332,480,281			435					Median =	760,481	
Other Inputs: Seats to Apportion								Min =	575,656	
435: Max Seats to Calculate								Max =	1,079,341	
75: States										
50:										
<input type="checkbox"/> Include Washington										



**2020 Projections,  
Based on middle-term trend from 2014 to 2017**





apportionment2020ProjectionsOn2010\_2017ChangeIn2017CBEstimatesC2.xls

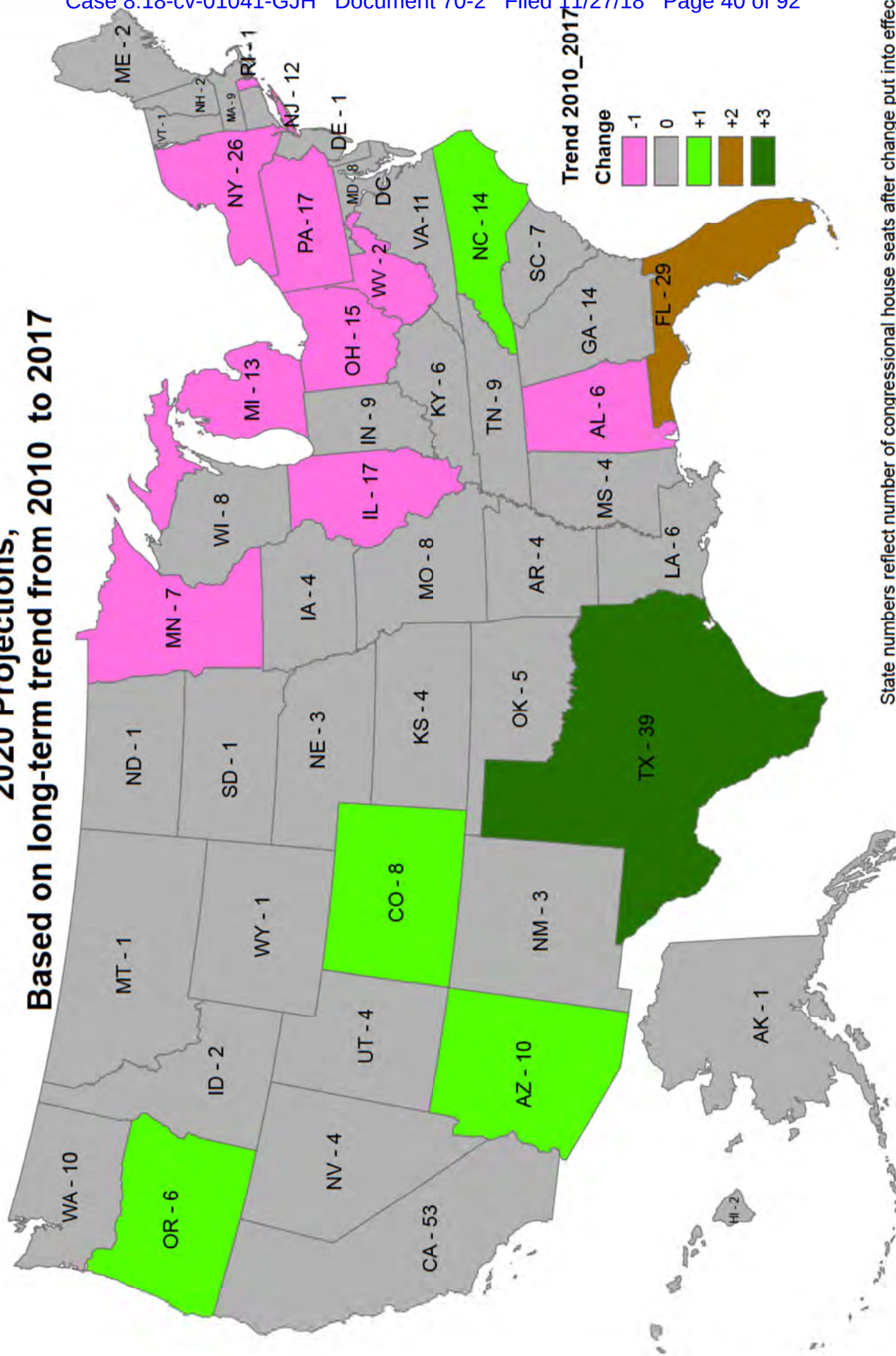
2020 Projections based on 2010-2017 Change in 2017 Population Estimates, Generated by Census Bureau 12/20/2017, with No Military Population

State	Population	Compare To	Seats	Change	Gain a Seat	Lose a Seat	Last Seat Given	Next Seat At	Average Size	Size Rank
Alabama	4,918,973	7	6	-1	88,485	735,322	375	439	819,829	7
Alaska	753,900	1	1	0			at large	629	753,900	32
Arizona	7,330,167	9	10	1	773,638	83,870	435	478	733,017	40
Arkansas	3,045,986	4	4	0	409,489	400,013	382	492	761,496	28
California	40,646,714	53	53	0	689,188	547,628	434	438	766,919	25
Colorado	5,902,421	7	8	1	653,880	186,465	425	483	737,803	38
Connecticut	3,594,666	5	5	0	637,408	178,730	416	512	718,933	43
Delaware	993,365	1	1	0			at large	476	993,365	3
Florida	22,099,273	27	29	2	691,142	333,561	432	445	762,044	27
Georgia	10,794,819	14	14	0	402,196	490,233	420	447	771,059	22
Hawaii	1,459,878	2	2	0	432,763	379,665	325	561	729,939	42
Idaho	1,791,884	2	2	0	100,757	711,671	269	459	895,942	6
Illinois	12,788,504	18	17	-1	727,656	191,151	433	460	752,265	33
Indiana	6,752,879	9	9	0	577,288	271,595	422	470	750,320	35
Iowa	3,192,483	4	4	0	262,991	546,510	363	469	798,121	11
Kansas	2,941,197	4	4	0	514,277	295,224	397	509	735,299	39
Kentucky	4,508,217	6	6	0	499,241	324,566	407	482	751,369	34
Louisiana	4,755,775	6	6	0	251,682	572,124	386	455	792,629	13
Maine	1,339,385	2	2	0	553,256	259,172	354	611	669,693	47
Maryland	6,185,926	8	8	0	370,375	469,970	403	463	773,241	19
Massachusetts	7,009,634	9	9	0	320,533	528,349	404	451	778,848	17
Michigan	9,998,426	14	13	-1	425,428	458,233	419	448	769,110	23
Minnesota	5,708,010	8	7	-1	74,104	757,847	381	437	815,430	9
Mississippi	2,991,471	4	4	0	464,003	345,498	392	501	747,868	36
Missouri	6,171,833	8	8	0	384,468	455,877	406	464	771,479	21
Montana	1,080,214	1	1	0			at large	436	1,080,214	1
Nebraska	1,965,243	3	3	0	711,356	94,258	418	589	655,081	48
Nevada	3,149,328	4	4	0	306,146	503,355	370	475	787,332	15
New Hampshire	1,355,104	2	2	0	537,538	274,890	345	603	677,552	46
New Jersey	9,105,974	12	12	0	544,639	330,274	423	462	758,831	30
New Mexico	2,101,491	3	3	0	575,108	230,506	393	548	700,497	45
New York	20,070,659	27	26	-1	401,383	596,822	427	441	771,948	20
North Carolina	10,637,703	13	14	1	559,312	333,117	426	454	759,836	29
North Dakota	798,016	1	1	0			at large	591	798,016	12
Ohio	11,715,063	16	15	-1	255,050	646,162	413	443	781,004	16
Oklahoma	4,016,945	5	5	0	215,130	601,008	374	456	803,389	10
Oregon	4,297,264	5	6	1	710,194	113,613	428	503	716,211	44
Pennsylvania	12,852,967	18	17	-1	663,193	255,613	430	452	756,057	31
Rhode Island	1,062,733	2	1	-1			at large	444	1,062,733	2
South Carolina	5,223,002	7	7	0	559,112	272,839	414	479	746,143	37
South Dakota	896,824	1	1	0			at large	528	896,824	5
Tennessee	6,895,305	9	9	0	434,862	414,021	412	465	766,145	26
Texas	29,934,070	36	39	3	583,848	529,220	431	440	767,540	24
Utah	3,275,665	4	4	0	179,809	629,692	355	457	818,916	8
Vermont	622,703	1	1	0			at large	741	622,703	49
Virginia	8,697,577	11	11	0	179,696	686,495	402	442	790,689	14
Washington	7,749,587	10	10	0	354,217	503,291	411	450	774,959	18
West Virginia	1,799,160	3	2	-1	93,482	718,946	267	453	899,580	4
Wisconsin	5,846,015	8	8	0	710,286	130,060	429	488	730,752	41
Wyoming	586,638	1	1	0			at large	783	586,638	50
Washington DC	742,708	0								
334,153,741			435					Median =	766,531	
Other Inputs: Seats to Apportion								Min =	586,638	
435: Max Seats to Calculate								Max =	1,080,214	
75: States										
50:										
<input type="checkbox"/> Include Washington										



# Anticipated Gains/Losses in Reapportionment

2020 Projections,  
Based on long-term trend from 2010 to 2017





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State	2016 Presidential Election				Electoral Votes For Clinton (D)	Electoral Votes For Trump (Rep)	Electoral Votes For Clinton (D)	Electoral Votes For Trump (Rep)
	New Apportionment Count (2010- 2017 Trend)	New Electoral College Count	2010s Electoral College Count	2000s Electoral College Count				
Alabama	6	8	9	9	Trump	0	9	0
Alaska	1	3	3	3	Trump	0	3	0
Arizona	10	12	11	10	Trump	0	11	0
Arkansas	4	6	6	6	Trump	0	6	0
California	53	55	55	55	Clinton	55	0	55
Colorado	8	10	9	9	Clinton	9	0	10
Connecticut	5	7	7	7	Clinton	7	0	7
Delaware	1	3	3	3	Clinton	3	0	3
Florida	29	31	29	27	Trump	0	29	0
Georgia	14	16	16	15	Trump	0	16	0
Hawaii	2	4	4	4	Clinton	3	0	3
Idaho	2	4	4	4	Trump	0	4	0
Illinois	17	19	20	21	Clinton	20	0	19
Indiana	9	11	11	11	Trump	0	11	0
Iowa	4	6	6	7	Trump	0	6	0
Kansas	4	6	6	6	Trump	0	6	0
Kentucky	6	8	8	8	Trump	0	8	0
Louisiana	6	8	8	9	Trump	0	8	0
Maine	2	4	4	4	Clinton	3	1	4
Maryland	8	10	10	10	Clinton	10	0	10
Massachusetts	9	11	11	12	Clinton	11	0	11
Michigan	13	15	16	17	Trump	0	16	0
Minnesota	7	9	10	10	Clinton	10	0	9
Mississippi	4	6	6	6	Trump	0	6	0
Missouri	8	10	10	11	Trump	0	10	0
Montana	1	3	3	3	Trump	0	3	0
Nebraska	3	5	5	5	Trump	0	5	0
Nevada	4	6	6	5	Clinton	6	0	6
New Hampshire	2	4	4	4	Clinton	4	0	4
New Jersey	12	14	14	15	Clinton	14	0	14
New Mexico	3	5	5	5	Clinton	5	0	5
New York	28	28	29	31	Clinton	29	0	28
North Carolina	14	16	15	15	Trump	0	15	0
North Dakota	1	3	3	3	Trump	0	3	0
Ohio	15	17	18	20	Trump	0	18	0
Oklahoma	5	7	7	7	Trump	0	7	0
Oregon	6	8	7	7	Clinton	7	0	8
Pennsylvania	17	19	20	21	Trump	0	20	0
Rhode Island	1	3	4	4	Clinton	4	0	3
South Carolina	7	9	9	8	Trump	0	9	0
South Dakota	1	3	3	3	Trump	0	3	0
Tennessee	9	11	11	11	Trump	0	11	0
Texas	39	41	38	34	Trump	0	36	0
Utah	4	6	6	5	Trump	0	6	0
Vermont	1	3	3	3	Clinton	3	0	3
Virginia	11	13	13	13	Clinton	13	0	13
Washington	10	12	12	11	Clinton	8	0	9
West Virginia	2	4	5	5	Trump	0	5	0
Wisconsin	8	10	10	10	Trump	0	10	0
Wyoming	1	3	3	3	Trump	0	3	0
Washington DC		2	3	2	Clinton	3	0	2
					227	304	226	305
							-1	1
					#One elector voted for John Kasich for President			
					#One elector voted for Ron Paul for President			
					&Three electors voted for Colin Powell for President			
					&One elector voted for Faith Spotted Eagle			
					*One elector voted for Bernie Sanders			



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State					2012 Presidential Election					2008 Presidential Election				
	New	New	2010s	2000s	2012 Presidential Victor	Electoral Votes For	Electoral Votes For	Electoral Votes For	Electoral Votes For	2008 Presidential Victor	Electoral Votes For	Electoral Votes For	Electoral Votes For	Electoral Votes For
	Apportionment Count (2010- 2017 Trend)	Electoral College Count	Electoral College Count	Electoral College Count		Obama (D)	Romney (Rep)	Obama (D)	Romney (Rep)		Obama (D)	McCain (Rep)	Obama (D)	McCain (Rep)
Alabama	6	8	9	9	Romney	0	9	0	8	McCain	0	9	0	8
Alaska	1	3	3	3	Romney	0	3	0	3	McCain	0	3	0	3
Arizona	10	12	11	10	Romney	0	11	0	12	McCain	0	10	0	12
Arkansas	4	6	6	6	Romney	0	6	0	6	McCain	0	6	0	6
California	53	55	55	55	Obama	55	0	55	0	Obama	55	0	55	0
Colorado	8	10	9	9	Obama	9	0	10	0	Obama	9	0	10	0
Connecticut	5	7	7	7	Obama	7	0	7	0	Obama	7	0	7	0
Delaware	1	3	3	3	Obama	3	0	3	0	Obama	3	0	3	0
Florida	29	31	29	27	Obama	29	0	31	0	Obama	27	0	31	0
Georgia	14	16	16	15	Romney	0	16	0	16	McCain	0	15	0	16
Hawaii	2	4	4	4	Obama	4	0	4	0	Obama	4	0	4	0
Idaho	2	4	4	4	Romney	0	4	0	4	McCain	0	4	0	4
Illinois	17	19	20	21	Obama	20	0	19	0	Obama	21	0	19	0
Indiana	9	11	11	11	Romney	0	11	0	11	Obama	11	0	11	0
Iowa	4	6	6	7	Obama	6	0	6	0	Obama	7	0	6	0
Kansas	4	6	6	6	Romney	0	6	0	6	McCain	0	6	0	6
Kentucky	6	8	8	8	Romney	0	8	0	8	McCain	0	8	0	8
Louisiana	6	8	8	9	Romney	0	8	0	8	McCain	0	9	0	8
Maine	2	4	4	4	Obama	4	0	4	0	Obama	4	0	4	0
Maryland	8	10	10	10	Obama	10	0	10	0	Obama	10	0	10	0
Massachusetts	9	11	11	12	Obama	11	0	11	0	Obama	12	0	11	0
Michigan	13	15	16	17	Obama	16	0	15	0	Obama	17	0	15	0
Minnesota	7	9	10	10	Obama	10	0	9	0	Obama	10	0	9	0
Mississippi	4	6	6	6	Romney	0	6	0	6	McCain	0	6	0	6
Missouri	8	10	10	11	Romney	0	10	0	10	McCain	0	11	0	10
Montana	1	3	3	3	Romney	0	3	0	3	McCain	0	3	0	3
Nebraska	3	5	5	5	Romney	0	5	0	5	McCain	1	4	1	4
Nevada	4	6	6	5	Obama	6	0	6	0	Obama	5	0	6	0
New Hampshire	2	4	4	4	Obama	4	0	4	0	Obama	4	0	4	0
New Jersey	12	14	14	15	Obama	14	0	14	0	Obama	15	0	14	0
New Mexico	3	5	5	5	Obama	5	0	5	0	Obama	5	0	5	0
New York	28	28	29	31	Obama	29	0	28	0	Obama	31	0	28	0
North Carolina	14	16	15	15	Romney	0	15	0	16	Obama	15	0	16	0
North Dakota	1	3	3	3	Romney	0	3	0	3	McCain	0	3	0	3
Ohio	15	17	18	20	Obama	18	0	17	0	Obama	20	0	17	0
Oklahoma	5	7	7	7	Romney	0	7	0	7	McCain	0	7	0	7
Oregon	6	8	7	7	Obama	7	0	8	0	Obama	7	0	8	0
Pennsylvania	17	19	20	21	Obama	20	0	19	0	Obama	21	0	19	0
Rhode Island	1	3	4	4	Obama	4	0	3	0	Obama	4	0	3	0
South Carolina	7	9	9	8	Romney	0	9	0	9	McCain	0	8	0	9
South Dakota	1	3	3	3	Romney	0	3	0	3	McCain	0	3	0	3
Tennessee	9	11	11	11	Romney	0	11	0	11	McCain	0	11	0	11
Texas	39	41	38	34	Romney	0	38	0	41	McCain	0	34	0	41
Utah	4	6	6	5	Romney	0	6	0	6	McCain	0	5	0	6
Vermont	1	3	3	3	Obama	3	0	3	0	Obama	3	0	3	0
Virginia	11	13	13	13	Obama	13	0	13	0	Obama	13	0	13	0
Washington	10	12	12	11	Obama	12	0	12	0	Obama	11	0	12	0
West Virginia	2	4	5	5	Romney	0	5	0	4	McCain	0	5	0	4
Wisconsin	8	10	10	10	Obama	10	0	10	0	Obama	10	0	10	0
Wyoming	1	3	3	3	Romney	0	3	0	3	McCain	0	3	0	3
Washington DC		2	3	2	Obama	3	0	2	0	Obama	3	0	2	0
						332	206	328	209		365	173	356	181
								-4	3				-9	8



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State					2004 Presidential Election					2000 Presidential Election				
	New	New	2010s	2000s	2004 Presidential Victor	Electoral	Electoral	Revised	Revised	2000 Presidential Victor	Electoral	Electoral	Revised	Revised
	Apportionment Count (2010- 2017 Trend)	Electoral College Count	Electoral College Count	Electoral College Count		Votes For Kerry (D)	Votes For Bush (Rep)	Votes For Kerry (D)	Votes For Bush (Rep)		Votes For Gore (D)	Votes For Bush (Rep)	Votes For Gore (D)	Votes For Bush (Rep)
Alabama	6	8	9	9	Bush	0	9	0	8	Bush	0	9	0	8
Alaska	1	3	3	3	Bush	0	3	0	3	Bush	0	3	0	3
Arizona	10	12	11	10	Bush	0	10	0	12	Bush	0	8	0	12
Arkansas	4	6	6	6	Bush	0	6	0	6	Bush	0	6	0	6
California	53	55	55	55	Kerry	55	0	55	0	Gore	54	0	55	0
Colorado	8	10	9	9	Bush	0	9	0	10	Bush	0	8	0	10
Connecticut	5	7	7	7	Kerry	7	0	7	0	Gore	8	0	7	0
Delaware	1	3	3	3	Kerry	3	0	3	0	Gore	3	0	3	0
Florida	29	31	29	27	Bush	0	27	0	31	Bush	0	25	0	31
Georgia	14	16	16	15	Bush	0	15	0	16	Bush	0	13	0	16
Hawaii	2	4	4	4	Kerry	4	0	4	0	Gore	4	0	4	0
Idaho	2	4	4	4	Bush	0	4	0	4	Bush	0	4	0	4
Illinois	17	19	20	21	Kerry	21	0	19	0	Gore	22	0	19	0
Indiana	9	11	11	11	Bush	0	11	0	11	Bush	0	12	0	11
Iowa	4	6	6	7	Bush	0	7	0	6	Gore	7	0	6	0
Kansas	4	6	6	6	Bush	0	6	0	6	Bush	0	6	0	6
Kentucky	6	8	8	8	Bush	0	8	0	8	Bush	0	8	0	8
Louisiana	6	8	8	9	Bush	0	9	0	8	Bush	0	9	0	8
Maine	2	4	4	4	Kerry	4	0	4	0	Gore	4	0	4	0
Maryland	8	10	10	10	Kerry	10	0	10	0	Gore	10	0	10	0
Massachusetts	9	11	11	12	Kerry	12	0	11	0	Gore	12	0	11	0
Michigan	13	15	16	17	Kerry	17	0	15	0	Gore	18	0	15	0
Minnesota	7	9	10	10	Kerry	9	0	9	0	Gore	10	0	9	0
Mississippi	4	6	6	6	Bush	0	6	0	6	Bush	0	7	0	6
Missouri	8	10	10	11	Bush	0	11	0	10	Bush	0	11	0	10
Montana	1	3	3	3	Bush	0	3	0	3	Bush	0	3	0	3
Nebraska	3	5	5	5	Bush	0	5	0	5	Bush	0	5	0	5
Nevada	4	6	6	5	Bush	0	5	0	6	Bush	0	4	0	6
New Hampshire	2	4	4	4	Kerry	4	0	4	0	Bush	0	4	0	4
New Jersey	12	14	14	15	Kerry	15	0	14	0	Gore	15	0	14	0
New Mexico	3	5	5	5	Bush	0	5	0	5	Gore	5	0	5	0
New York	28	28	29	31	Kerry	31	0	28	0	Gore	33	0	28	0
North Carolina	14	16	15	15	Bush	0	15	0	16	Bush	0	14	0	16
North Dakota	1	3	3	3	Bush	0	3	0	3	Bush	0	3	0	3
Ohio	15	17	18	20	Bush	0	20	0	17	Bush	0	21	0	17
Oklahoma	5	7	7	7	Bush	0	7	0	7	Bush	0	8	0	7
Oregon	6	8	7	7	Kerry	7	0	8	0	Gore	7	0	8	0
Pennsylvania	17	19	20	21	Kerry	21	0	19	0	Gore	23	0	19	0
Rhode Island	1	3	4	4	Kerry	4	0	3	0	Gore	4	0	3	0
South Carolina	7	9	9	8	Bush	0	8	0	9	Bush	0	8	0	9
South Dakota	1	3	3	3	Bush	0	3	0	3	Bush	0	3	0	3
Tennessee	9	11	11	11	Bush	0	11	0	11	Bush	0	11	0	11
Texas	39	41	38	34	Bush	0	34	0	41	Bush	0	32	0	41
Utah	4	6	6	5	Bush	0	5	0	6	Bush	0	5	0	6
Vermont	1	3	3	3	Kerry	3	0	3	0	Gore	3	0	3	0
Virginia	11	13	13	13	Bush	0	13	0	13	Bush	0	13	0	13
Washington	10	12	12	11	Kerry	11	0	12	0	Gore	11	0	12	0
West Virginia	2	4	5	5	Bush	0	5	0	4	Bush	0	5	0	4
Wisconsin	8	10	10	10	Kerry	10	0	10	0	Gore	11	0	10	0
Wyoming	1	3	3	3	Bush	0	3	0	3	Bush	0	3	0	3
Washington DC		2	3	2	Kerry	3	0	2	0	Gore	2	0	2	0
						251	266	240	297		266	271	247	290
								-11	11				-19	19



# EXHIBIT 3



Table 1: Baseline Reapportionment Projections for 2020

State	Population Projection	Congressional Seats
Alabama	4,906,793	6
Alaska	742,589	1
Arizona	7,313,407	10
Arkansas	3,040,950	4
California	40,318,943	53
Colorado	5,861,962	8
Connecticut	3,577,217	5
Delaware	987,534	1
Florida	22,034,897	29
Georgia	10,756,967	14
Hawaii	1,436,609	2
Idaho	1,800,494	2
Illinois	12,728,769	17
Indiana	6,735,072	9
Iowa	3,182,989	4
Kansas	2,925,620	4
Kentucky	4,494,713	6
Louisiana	4,717,157	6
Maine	1,342,361	2
Maryland	6,128,312	8
Massachusetts	6,954,630	9
Michigan	10,006,187	13
Minnesota	5,692,816	7
Mississippi	2,980,001	4
Missouri	6,164,890	8
Montana	1,079,348	1
Nebraska	1,956,716	3
Nevada	3,159,442	4
New Hampshire	1,355,867	2
New Jersey	9,063,461	12
New Mexico	2,092,538	3
New York	19,919,166	26
North Carolina	10,588,169	14
North Dakota	771,081	1
Ohio	11,718,404	15
Oklahoma	3,982,803	5
Oregon	4,317,379	6
Pennsylvania	12,819,483	17
Rhode Island	1,064,112	1
South Carolina	5,214,916	7
South Dakota	888,634	1
Tennessee	6,881,637	9
Texas	29,604,237	39
Utah	3,259,702	4
Vermont	621,822	1
Virginia	8,612,962	11
Washington	7,751,401	10
West Virginia	1,787,238	2
Wisconsin	5,836,321	8
Wyoming	575,656	1
Washington DC	725,909	-
<b>United States</b>	<b>332,480,287</b>	<b>435</b>



Table 2A: Reapportionment Projections for 2020 With 2% Undercount Due to Citizenship Question

State	Projected Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Projected Census Count	Congressional Seats
Alabama	4,906,793	4.31%	2.07%	0.89%	5,108	4,901,685	6
Alaska	742,589	7.28%	4.05%	3.73%	1,635	740,954	1
Arizona	7,313,407	32.18%	6.76%	2.37%	50,529	7,262,878	10
Arkansas	3,040,950	7.95%	3.04%	1.30%	5,628	3,035,322	4
California	40,318,943	39.63%	12.36%	5.03%	360,090	39,958,853	52
Colorado	5,861,962	21.83%	5.30%	2.38%	28,380	5,833,582	8
Connecticut	3,577,217	17.20%	7.23%	4.02%	15,182	3,562,035	5
Delaware	987,534	9.69%	6.67%	3.02%	2,511	985,023	1
Florida	22,034,897	27.08%	9.44%	3.66%	135,493	21,899,404	29
Georgia	10,756,967	10.06%	5.75%	3.06%	28,211	10,728,756	14
Hawaii	1,436,609	10.92%	7.08%	6.61%	5,039	1,431,571	2
Idaho	1,800,494	12.82%	3.33%	1.18%	5,042	1,795,452	2
Illinois	12,728,769	17.75%	7.22%	3.48%	54,043	12,674,726	17
Indiana	6,735,072	7.39%	3.52%	2.02%	12,673	6,722,398	9
Iowa	3,182,989	6.30%	3.25%	2.05%	5,313	3,177,677	4
Kansas	2,925,620	12.37%	3.86%	1.70%	8,236	2,917,385	4
Kentucky	4,494,713	3.67%	2.12%	1.31%	4,480	4,490,234	6
Louisiana	4,717,157	5.58%	2.50%	0.99%	6,204	4,710,953	6
Maine	1,342,361	1.79%	1.20%	1.14%	785	1,341,576	2
Maryland	6,128,312	10.94%	6.98%	3.85%	18,122	6,110,190	8
Massachusetts	6,954,630	12.83%	8.52%	6.51%	26,911	6,927,719	9
Michigan	10,006,187	5.32%	3.84%	3.03%	16,708	9,989,480	13
Minnesota	5,692,816	5.56%	4.39%	3.28%	10,071	5,682,746	7
Mississippi	2,980,001	3.07%	1.15%	0.54%	2,154	2,977,847	4
Missouri	6,164,890	4.52%	2.34%	1.59%	7,535	6,157,355	8
Montana	1,079,348	4.03%	0.91%	0.56%	990	1,078,358	2
Nebraska	1,956,716	11.75%	4.73%	2.09%	5,413	1,951,303	3
Nevada	3,159,442	29.81%	9.63%	3.16%	20,834	3,138,608	4
New Hampshire	1,355,867	4.35%	3.18%	2.74%	1,923	1,353,945	2
New Jersey	9,063,461	21.49%	10.39%	5.68%	49,249	9,014,212	12
New Mexico	2,092,538	49.80%	4.88%	0.99%	21,258	2,071,280	3
New York	19,919,166	19.79%	9.67%	5.75%	101,714	19,817,453	26
North Carolina	10,588,169	9.76%	4.95%	2.40%	25,754	10,562,415	14
North Dakota	771,081	4.33%	3.14%	2.55%	1,062	770,019	1
Ohio	11,718,404	4.05%	2.34%	1.83%	13,795	11,704,609	15
Oklahoma	3,982,803	11.48%	3.43%	1.29%	10,176	3,972,628	5
Oregon	4,317,379	13.58%	4.96%	2.58%	13,954	4,303,425	6
Pennsylvania	12,819,483	8.13%	3.46%	2.47%	27,165	12,792,319	17
Rhode Island	1,064,112	16.81%	6.36%	3.53%	4,327	1,059,785	1
South Carolina	5,214,916	6.05%	2.59%	1.17%	7,529	5,207,387	7
South Dakota	888,634	3.82%	2.35%	0.85%	830	887,804	1
Tennessee	6,881,637	5.84%	3.35%	1.68%	10,348	6,871,289	9
Texas	29,604,237	40.19%	10.59%	3.01%	255,745	29,348,492	39
Utah	3,259,702	14.49%	5.32%	2.06%	10,785	3,248,917	4
Vermont	621,822	2.11%	2.11%	1.94%	504	621,319	1
Virginia	8,612,962	9.86%	5.89%	3.36%	22,785	8,590,177	11
Washington	7,751,401	13.22%	7.73%	4.71%	27,810	7,723,591	10
West Virginia	1,787,238	1.20%	0.89%	0.76%	701	1,786,537	2
Wisconsin	5,836,321	7.28%	2.61%	1.57%	10,332	5,825,989	8
Wyoming	575,656	10.28%	2.11%	0.83%	1,279	574,377	1
Washington DC	725,909	11.70%	9.60%	5.83%	2,544	723,365	
<b>United States</b>	<b>332,480,287</b>	<b>18.77%</b>	<b>6.86%</b>	<b>3.25%</b>	<b>1,464,886</b>	<b>331,015,401</b>	<b>435</b>



Table 2B: Reapportionment Projections for 2020 With 5.8% Undercount Due to Citizenship Question

State	Projected Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Projected Census Count	Congressional Seats
Alabama	4,906,793	4.31%	2.07%	0.89%	14,812	4,891,981	6
Alaska	742,589	7.28%	4.05%	3.73%	4,742	737,847	1
Arizona	7,313,407	32.18%	6.76%	2.37%	146,534	7,166,873	10
Arkansas	3,040,950	7.95%	3.04%	1.30%	16,320	3,024,630	4
California	40,318,943	39.63%	12.36%	5.03%	1,044,261	39,274,682	52
Colorado	5,861,962	21.83%	5.30%	2.38%	82,302	5,779,660	8
Connecticut	3,577,217	17.20%	7.23%	4.02%	44,029	3,533,188	5
Delaware	987,534	9.69%	6.67%	3.02%	7,282	980,252	1
Florida	22,034,897	27.08%	9.44%	3.66%	392,930	21,641,967	29
Georgia	10,756,967	10.06%	5.75%	3.06%	81,811	10,675,156	14
Hawaii	1,436,609	10.92%	7.08%	6.61%	14,613	1,421,997	2
Idaho	1,800,494	12.82%	3.33%	1.18%	14,622	1,785,873	2
Illinois	12,728,769	17.75%	7.22%	3.48%	156,726	12,572,044	17
Indiana	6,735,072	7.39%	3.52%	2.02%	36,752	6,698,319	9
Iowa	3,182,989	6.30%	3.25%	2.05%	15,406	3,167,583	4
Kansas	2,925,620	12.37%	3.86%	1.70%	23,884	2,901,736	4
Kentucky	4,494,713	3.67%	2.12%	1.31%	12,991	4,481,723	6
Louisiana	4,717,157	5.58%	2.50%	0.99%	17,992	4,699,165	6
Maine	1,342,361	1.79%	1.20%	1.14%	2,277	1,340,084	2
Maryland	6,128,312	10.94%	6.98%	3.85%	52,554	6,075,758	8
Massachusetts	6,954,630	12.83%	8.52%	6.51%	78,042	6,876,588	9
Michigan	10,006,187	5.32%	3.84%	3.03%	48,452	9,957,735	13
Minnesota	5,692,816	5.56%	4.39%	3.28%	29,204	5,663,612	8
Mississippi	2,980,001	3.07%	1.15%	0.54%	6,247	2,973,754	4
Missouri	6,164,890	4.52%	2.34%	1.59%	21,851	6,143,039	8
Montana	1,079,348	4.03%	0.91%	0.56%	2,870	1,076,477	2
Nebraska	1,956,716	11.75%	4.73%	2.09%	15,698	1,941,018	3
Nevada	3,159,442	29.81%	9.63%	3.16%	60,419	3,099,023	4
New Hampshire	1,355,867	4.35%	3.18%	2.74%	5,577	1,350,291	2
New Jersey	9,063,461	21.49%	10.39%	5.68%	142,821	8,920,639	12
New Mexico	2,092,538	49.80%	4.88%	0.99%	61,647	2,030,891	3
New York	19,919,166	19.79%	9.67%	5.75%	294,969	19,624,197	26
North Carolina	10,588,169	9.76%	4.95%	2.40%	74,688	10,513,481	14
North Dakota	771,081	4.33%	3.14%	2.55%	3,080	768,001	1
Ohio	11,718,404	4.05%	2.34%	1.83%	40,005	11,678,399	15
Oklahoma	3,982,803	11.48%	3.43%	1.29%	29,509	3,953,294	5
Oregon	4,317,379	13.58%	4.96%	2.58%	40,466	4,276,913	6
Pennsylvania	12,819,483	8.13%	3.46%	2.47%	78,778	12,740,706	17
Rhode Island	1,064,112	16.81%	6.36%	3.53%	12,548	1,051,564	1
South Carolina	5,214,916	6.05%	2.59%	1.17%	21,833	5,193,083	7
South Dakota	888,634	3.82%	2.35%	0.85%	2,406	886,227	1
Tennessee	6,881,637	5.84%	3.35%	1.68%	30,010	6,851,627	9
Texas	29,604,237	40.19%	10.59%	3.01%	741,661	28,862,576	38
Utah	3,259,702	14.49%	5.32%	2.06%	31,278	3,228,425	4
Vermont	621,822	2.11%	2.11%	1.94%	1,461	620,362	1
Virginia	8,612,962	9.86%	5.89%	3.36%	66,078	8,546,884	11
Washington	7,751,401	13.22%	7.73%	4.71%	80,649	7,670,752	10
West Virginia	1,787,238	1.20%	0.89%	0.76%	2,033	1,785,205	2
Wisconsin	5,836,321	7.28%	2.61%	1.57%	29,963	5,806,358	8
Wyoming	575,656	10.28%	2.11%	0.83%	3,709	571,947	1
Washington DC	725,909	11.70%	9.60%	5.83%	7,378	718,531	
<b>United States</b>	<b>332,480,287</b>	<b>18.77%</b>	<b>6.86%</b>	<b>3.25%</b>	<b>4,248,169</b>	<b>328,232,119</b>	<b>435</b>



Table 2C: Reapportionment Projections for 2020 With 8.09% Undercount Due to Citizenship Question

State	Projected Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Projected Census Count	Congressional Seats
Alabama	4,906,793	4.31%	2.07%	0.89%	20,660	4,886,133	7
Alaska	742,589	7.28%	4.05%	3.73%	6,614	735,975	1
Arizona	7,313,407	32.18%	6.76%	2.37%	204,390	7,109,017	9
Arkansas	3,040,950	7.95%	3.04%	1.30%	22,763	3,018,187	4
California	40,318,943	39.63%	12.36%	5.03%	1,456,564	38,862,379	52
Colorado	5,861,962	21.83%	5.30%	2.38%	114,797	5,747,165	8
Connecticut	3,577,217	17.20%	7.23%	4.02%	61,413	3,515,804	5
Delaware	987,534	9.69%	6.67%	3.02%	10,157	977,377	1
Florida	22,034,897	27.08%	9.44%	3.66%	548,070	21,486,828	29
Georgia	10,756,967	10.06%	5.75%	3.06%	114,112	10,642,855	14
Hawaii	1,436,609	10.92%	7.08%	6.61%	20,382	1,416,227	2
Idaho	1,800,494	12.82%	3.33%	1.18%	20,395	1,780,100	2
Illinois	12,728,769	17.75%	7.22%	3.48%	218,605	12,510,164	17
Indiana	6,735,072	7.39%	3.52%	2.02%	51,263	6,683,809	9
Iowa	3,182,989	6.30%	3.25%	2.05%	21,489	3,161,500	4
Kansas	2,925,620	12.37%	3.86%	1.70%	33,314	2,892,306	4
Kentucky	4,494,713	3.67%	2.12%	1.31%	18,120	4,476,594	6
Louisiana	4,717,157	5.58%	2.50%	0.99%	25,095	4,692,062	6
Maine	1,342,361	1.79%	1.20%	1.14%	3,176	1,339,185	2
Maryland	6,128,312	10.94%	6.98%	3.85%	73,303	6,055,009	8
Massachusetts	6,954,630	12.83%	8.52%	6.51%	108,856	6,845,774	9
Michigan	10,006,187	5.32%	3.84%	3.03%	67,582	9,938,605	13
Minnesota	5,692,816	5.56%	4.39%	3.28%	40,735	5,652,081	8
Mississippi	2,980,001	3.07%	1.15%	0.54%	8,713	2,971,288	4
Missouri	6,164,890	4.52%	2.34%	1.59%	30,478	6,134,412	8
Montana	1,079,348	4.03%	0.91%	0.56%	4,004	1,075,344	2
Nebraska	1,956,716	11.75%	4.73%	2.09%	21,897	1,934,820	3
Nevada	3,159,442	29.81%	9.63%	3.16%	84,274	3,075,168	4
New Hampshire	1,355,867	4.35%	3.18%	2.74%	7,778	1,348,089	2
New Jersey	9,063,461	21.49%	10.39%	5.68%	199,211	8,864,250	12
New Mexico	2,092,538	49.80%	4.88%	0.99%	85,987	2,006,551	3
New York	19,919,166	19.79%	9.67%	5.75%	411,431	19,507,735	26
North Carolina	10,588,169	9.76%	4.95%	2.40%	104,177	10,483,993	14
North Dakota	771,081	4.33%	3.14%	2.55%	4,296	766,785	1
Ohio	11,718,404	4.05%	2.34%	1.83%	55,800	11,662,604	15
Oklahoma	3,982,803	11.48%	3.43%	1.29%	41,161	3,941,643	5
Oregon	4,317,379	13.58%	4.96%	2.58%	56,443	4,260,936	6
Pennsylvania	12,819,483	8.13%	3.46%	2.47%	109,881	12,709,602	17
Rhode Island	1,064,112	16.81%	6.36%	3.53%	17,502	1,046,610	1
South Carolina	5,214,916	6.05%	2.59%	1.17%	30,454	5,184,462	7
South Dakota	888,634	3.82%	2.35%	0.85%	3,357	885,277	1
Tennessee	6,881,637	5.84%	3.35%	1.68%	41,858	6,839,778	9
Texas	29,604,237	40.19%	10.59%	3.01%	1,034,489	28,569,748	38
Utah	3,259,702	14.49%	5.32%	2.06%	43,627	3,216,075	4
Vermont	621,822	2.11%	2.11%	1.94%	2,037	619,785	1
Virginia	8,612,962	9.86%	5.89%	3.36%	92,167	8,520,795	11
Washington	7,751,401	13.22%	7.73%	4.71%	112,492	7,638,909	10
West Virginia	1,787,238	1.20%	0.89%	0.76%	2,835	1,784,403	2
Wisconsin	5,836,321	7.28%	2.61%	1.57%	41,793	5,794,528	8
Wyoming	575,656	10.28%	2.11%	0.83%	5,174	570,482	1
Washington DC	725,909	11.70%	9.60%	5.83%	10,291	715,618	
<b>United States</b>	<b>332,480,287</b>	<b>18.77%</b>	<b>6.86%</b>	<b>3.25%</b>	<b>5,925,463</b>	<b>326,554,824</b>	<b>435</b>



Table 3A: Select Counties' Projections With 2% Undercount Due to Citizenship Question

State	County	Actual Population Projection	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Census Count With Citizenship Question	Census Undercount Percentage	Statewide Share of Counted Population	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population
Arizona	Maricopa County	4,350,562	61.70%	31.01%	8.39%	2.75%	4,321,188	0.675%	61.695%	-0.001%	-0.001%
	Santa Cruz County	45,837	0.65%	83.85%	11.56%	0.47%	45,064	1.686%	0.643%	-0.007%	-1.019%
	Yuma County	208,739	2.96%	64.32%	15.35%	2.40%	205,953	1.335%	2.940%	-0.020%	-0.665%
California	Rest of State	2,446,481	34.69%	28.24%	5.04%	1.64%	2,431,862	0.598%	34.721%	0.027%	0.077%
	Los Angeles County	10,265,132	25.71%	48.86%	15.84%	4.88%	10,154,804	1.075%	25.657%	-0.050%	-0.194%
	Rest of State	29,665,718	74.29%	36.12%	12.02%	4.67%	29,423,684	0.816%	74.343%	0.050%	0.067%
Florida	Miami-Dade County	2,815,121	13.38%	68.41%	21.80%	3.48%	2,774,643	1.438%	13.268%	-0.115%	-0.860%
	Rest of State	18,220,012	86.62%	19.11%	6.73%	3.45%	18,137,791	0.451%	86.732%	0.115%	0.133%
Maryland	Prince George's County	928,797	15.18%	18.60%	12.99%	4.68%	924,473	0.466%	15.149%	-0.027%	-0.179%
	Rest of State	5,191,489	84.82%	8.80%	6.42%	3.95%	5,178,251	0.255%	84.851%	0.027%	0.032%
Nevada	Clark County	2,192,184	73.54%	31.52%	10.81%	3.39%	2,176,874	0.698%	73.496%	-0.043%	-0.058%
	Rest of State	788,821	26.46%	22.23%	6.31%	1.80%	785,029	0.481%	26.504%	0.043%	0.161%
New Jersey	Hudson County	699,537	7.76%	43.81%	23.14%	11.49%	691,799	1.106%	7.709%	-0.046%	-0.590%
	Rest of State	8,320,708	92.24%	18.86%	8.60%	4.64%	8,281,594	0.470%	92.291%	0.046%	0.050%
South Dakota	Todd County	10,321	1.17%	6.05%	12.72%	12.25%	10,283	0.366%	1.164%	-0.003%	-0.248%
	Rest of State	874,075	98.83%	4.05%	2.34%	1.71%	873,069	0.115%	98.836%	0.003%	0.003%
Texas	Dallas County	2,644,011	9.22%	40.35%	16.62%	3.72%	2,620,707	0.881%	9.213%	-0.003%	-0.037%
	El Paso County	859,964	3.00%	82.03%	14.05%	0.91%	845,700	1.659%	2.973%	-0.025%	-0.821%
	Harris County	4,768,198	16.62%	42.81%	16.91%	4.50%	4,723,079	0.946%	16.604%	-0.017%	-0.102%
	Hidalgo County	877,690	3.06%	92.37%	19.14%	0.35%	861,414	1.854%	3.028%	-0.031%	-1.018%
	Webb County	280,590	0.98%	95.45%	17.77%	0.39%	275,212	1.917%	0.968%	-0.011%	-1.081%
Washington	Rest of State	19,256,879	67.13%	33.51%	7.62%	2.34%	19,118,836	0.717%	67.213%	0.087%	0.129%
	King County	2,217,756	29.96%	9.72%	11.81%	9.12%	2,209,399	0.377%	29.952%	-0.010%	-0.034%
	Rest of State	5,184,134	70.038%	14.175%	5.34%	2.252%	5,167,102	0.329%	70.048%	0.010%	0.015%



Table 3B: Select Counties' Projections With 5.8% Undercount Due to Citizenship Question

State	County	Actual Population Projection	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Census Count With Citizenship Question	Census Undercount Percentage	Statewide Share of Counted Population	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population
Arizona	Maricopa County	4,350,562	61.70%	31.01%	8.39%	2.75%	4,265,378	1.958%	61.694%	-0.002%	-0.002%
	Santa Cruz County	45,837	0.65%	83.85%	11.56%	0.47%	43,595	4.891%	0.631%	-0.019%	-2.994%
	Yuma County	208,739	2.96%	64.33%	15.35%	2.40%	200,661	3.870%	2.902%	-0.058%	-1.953%
California	Rest of State	2,446,481	34.69%	28.24%	5.04%	1.64%	2,404,086	1.733%	34.773%	0.079%	0.227%
	Los Angeles County	10,265,132	25.71%	48.86%	15.84%	4.88%	9,945,179	3.117%	25.560%	-0.147%	-0.572%
	Rest of State	25,665,718	74.29%	36.12%	12.02%	4.67%	28,963,818	2.366%	74.440%	0.147%	0.198%
Florida	Miami-Dade County	2,815,121	13.38%	68.41%	21.80%	3.48%	2,697,735	4.170%	13.046%	-0.337%	-2.521%
	Rest of State	18,220,012	86.62%	19.11%	6.73%	3.45%	17,981,571	1.309%	86.954%	0.337%	0.389%
Maryland	Prince George's County	928,797	15.18%	18.60%	12.99%	4.68%	916,257	1.350%	15.096%	-0.079%	-0.522%
	Rest of State	5,191,489	84.82%	8.80%	6.42%	3.95%	5,153,100	0.739%	84.904%	0.079%	0.093%
Nevada	Clark County	2,192,184	73.54%	31.52%	10.81%	3.39%	2,147,787	2.025%	73.413%	-0.125%	-0.170%
	Rest of State	788,821	26.46%	22.23%	6.31%	1.80%	777,824	1.394%	26.587%	0.125%	0.473%
New Jersey	Hudson County	699,537	7.76%	43.81%	23.14%	11.49%	677,098	3.208%	7.621%	-0.134%	-1.727%
	Rest of State	8,320,708	92.24%	18.86%	8.60%	4.64%	8,207,278	1.363%	92.379%	0.134%	0.145%
South Dakota	Todd County	10,321	1.17%	6.05%	12.72%	12.25%	10,212	1.061%	1.159%	-0.008%	-0.721%
	Rest of State	874,075	98.83%	4.05%	2.34%	1.71%	871,157	0.334%	98.841%	0.008%	0.009%
	Dallas County	2,644,011	9.22%	40.35%	16.62%	3.72%	2,576,430	2.556%	9.207%	-0.010%	-0.108%
Texas	El Paso County	859,964	3.00%	82.03%	14.05%	0.91%	818,597	4.810%	2.925%	-0.073%	-2.419%
	Harris County	4,768,198	16.62%	42.81%	16.91%	4.50%	4,637,352	2.744%	16.571%	-0.050%	-0.301%
	Hidalgo County	877,690	3.06%	92.37%	19.14%	0.35%	830,491	5.378%	2.968%	-0.092%	-3.001%
	Webb County	280,590	0.98%	95.45%	17.77%	0.39%	264,993	5.559%	0.947%	-0.031%	-3.186%
	Rest of State	15,256,879	67.13%	33.51%	7.62%	2.34%	18,856,553	2.079%	67.382%	0.256%	0.381%
Washington	King County	2,217,756	29.96%	9.72%	11.81%	9.12%	2,193,521	1.093%	29.932%	-0.030%	-0.099%
	Rest of State	5,184,134	70.038%	14.175%	5.34%	2.252%	5,134,742	0.953%	70.068%	0.030%	0.042%



Table 3C: Select Counties' Projections With 8.09% Undercount Due to Citizenship Question

State	County	Actual Population Projection	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Citizen	Percent Non-Hispanic, Non-Citizen	Census Count With Citizenship Question	Census Undercount Percentage	Statewide Share of Counted Population	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population
Arizona	Maricopa County	4,350,562	61.70%	31.01%	8.39%	2.75%	4,231,746	2.731%	61.694%	-0.002%	-0.003%
	Santa Cruz County	45,837	0.65%	83.85%	11.56%	0.47%	42,710	6.821%	0.623%	-0.027%	-4.209%
	Yuma County	208,739	2.96%	64.33%	15.35%	2.40%	197,471	5.398%	2.879%	-0.081%	-2.745%
California	Rest of State	2,446,481	34.69%	28.24%	5.04%	1.64%	2,387,348	2.417%	34.805%	0.111%	0.319%
	Los Angeles County	10,265,132	25.71%	48.86%	15.84%	4.88%	9,818,853	4.348%	25.500%	-0.207%	-0.807%
	Rest of State	25,665,718	74.29%	36.12%	12.02%	4.67%	28,686,689	3.300%	74.500%	0.207%	0.279%
Florida	Miami-Dade County	2,815,121	13.38%	68.41%	21.80%	3.48%	2,651,388	5.816%	12.909%	-0.474%	-3.540%
	Rest of State	18,220,012	86.62%	19.11%	6.73%	3.45%	17,887,429	1.825%	87.091%	0.474%	0.547%
Maryland	Prince George's County	928,797	15.18%	18.60%	12.99%	4.68%	911,306	1.883%	15.065%	-0.111%	-0.731%
	Rest of State	5,191,489	84.82%	8.80%	6.42%	3.95%	5,137,943	1.031%	84.935%	0.111%	0.131%
Nevada	Clark County	2,192,184	73.54%	31.52%	10.81%	3.39%	2,130,258	2.825%	73.363%	-0.176%	-0.239%
	Rest of State	788,821	26.46%	22.23%	6.31%	1.80%	773,482	1.945%	26.637%	0.176%	0.665%
New Jersey	Hudson County	699,537	7.76%	43.81%	23.14%	11.49%	668,238	4.474%	7.567%	-0.188%	-2.424%
	Rest of State	8,320,708	92.24%	18.85%	8.60%	4.64%	8,162,493	1.901%	92.433%	0.188%	0.204%
South Dakota	Todd County	10,321	1.17%	6.05%	12.72%	12.25%	10,168	1.480%	1.155%	-0.012%	-1.008%
	Rest of State	874,075	98.83%	4.05%	2.34%	1.71%	870,004	0.466%	98.845%	0.012%	0.012%
	Dallas County	2,644,011	9.22%	40.35%	16.62%	3.72%	2,549,747	3.565%	9.203%	-0.014%	-0.153%
Texas	El Paso County	859,964	3.00%	82.03%	14.05%	0.91%	802,265	6.710%	2.896%	-0.102%	-3.408%
	Harris County	4,768,198	16.62%	42.81%	16.91%	4.50%	4,585,690	3.828%	16.551%	-0.071%	-0.424%
	Hidalgo County	877,690	3.06%	92.37%	19.14%	0.35%	811,855	7.501%	2.930%	-0.129%	-4.228%
	Webb County	280,590	0.98%	95.45%	17.77%	0.39%	258,835	7.753%	0.934%	-0.044%	-4.489%
	Rest of State	15,256,879	67.13%	33.51%	7.62%	2.34%	18,698,494	2.900%	67.487%	0.360%	0.536%
Washington	King County	2,217,756	29.96%	9.72%	11.81%	9.12%	2,183,952	1.524%	29.920%	-0.042%	-0.139%
	Rest of State	5,184,134	70.038%	14.175%	5.34%	2.252%	5,115,241	1.329%	70.080%	0.042%	0.059%



Table 4A: Statewide Population Projections for July 2020 With Undercount Rates Due to Citizenship Question

State	Projected Population July 2020	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Population Estimate (as of July 2020) With Undercount	Statewide Undercount Percentage
Alabama	4,909,706	4.33%	0.89%	5,124	4,904,582	0.10%
Alaska	742,844	7.31%	3.78%	1,646	741,197	0.22%
Arizona	7,340,419	32.25%	2.36%	50,810	7,289,609	0.69%
Arkansas	3,044,284	8.00%	1.31%	5,670	3,038,614	0.19%
California	40,390,060	39.67%	5.04%	361,168	40,028,891	0.89%
Colorado	5,885,126	21.85%	2.39%	28,534	5,856,593	0.48%
Connecticut	3,576,220	17.30%	4.00%	15,230	3,560,990	0.43%
Delaware	989,861	9.73%	3.02%	2,524	987,337	0.25%
Florida	22,130,397	27.21%	3.67%	136,667	21,993,730	0.62%
Georgia	10,786,748	10.10%	3.07%	28,410	10,758,338	0.26%
Hawaii	1,437,434	10.96%	6.59%	5,045	1,432,389	0.35%
Idaho	1,808,090	12.85%	1.18%	5,074	1,803,016	0.28%
Illinois	12,722,110	17.79%	3.51%	54,188	12,667,922	0.43%
Indiana	6,741,276	7.43%	2.04%	12,775	6,728,501	0.19%
Iowa	3,186,378	6.33%	2.05%	5,345	3,181,033	0.17%
Kansas	2,926,757	12.42%	1.70%	8,266	2,918,490	0.28%
Kentucky	4,498,397	3.69%	1.31%	4,500	4,493,898	0.10%
Louisiana	4,720,141	5.62%	0.99%	6,240	4,713,901	0.13%
Maine	1,342,948	1.80%	1.12%	784	1,342,163	0.06%
Maryland	6,135,233	11.01%	3.83%	18,210	6,117,024	0.30%
Massachusetts	6,963,249	12.92%	6.56%	27,135	6,936,115	0.39%
Michigan	10,010,176	5.35%	3.06%	16,827	9,993,349	0.17%
Minnesota	5,703,381	5.59%	3.31%	10,152	5,693,229	0.18%
Mississippi	2,979,629	3.09%	0.54%	2,164	2,977,465	0.07%
Missouri	6,169,559	4.55%	1.61%	7,595	6,161,964	0.12%
Montana	1,081,971	4.06%	0.54%	995	1,080,976	0.09%
Nebraska	1,960,047	11.82%	2.11%	5,460	1,954,587	0.28%
Nevada	3,174,115	29.89%	3.16%	20,984	3,153,132	0.66%
New Hampshire	1,357,056	4.40%	2.77%	1,946	1,355,110	0.14%
New Jersey	9,068,717	21.59%	5.70%	49,489	9,019,228	0.55%
New Mexico	2,092,944	49.90%	0.99%	21,301	2,071,643	1.02%
New York	19,925,509	19.84%	5.73%	101,899	19,823,609	0.51%
North Carolina	10,616,783	9.80%	2.42%	25,951	10,590,831	0.24%
North Dakota	772,507	4.41%	2.59%	1,081	771,426	0.14%
Ohio	11,723,840	4.08%	1.84%	13,890	11,709,950	0.12%
Oklahoma	3,987,525	11.56%	1.29%	10,249	3,977,276	0.26%
Oregon	4,333,252	13.62%	2.58%	14,048	4,319,204	0.32%
Pennsylvania	12,820,751	8.20%	2.48%	27,392	12,793,360	0.21%
Rhode Island	1,064,518	16.93%	3.54%	4,359	1,060,159	0.41%
South Carolina	5,232,238	6.08%	1.17%	7,586	5,224,652	0.14%
South Dakota	890,358	3.84%	0.81%	829	889,529	0.09%
Tennessee	6,896,696	5.88%	1.69%	10,443	6,886,253	0.15%
Texas	29,722,386	40.25%	3.03%	257,279	29,465,107	0.87%
Utah	3,274,054	14.53%	2.07%	10,870	3,263,184	0.33%
Vermont	621,655	2.13%	1.94%	506	621,149	0.08%
Virginia	8,625,957	9.91%	3.36%	22,904	8,603,053	0.27%
Washington	7,782,825	13.27%	4.74%	28,029	7,754,796	0.36%
West Virginia	1,784,636	1.19%	0.78%	702	1,783,934	0.04%
Wisconsin	5,840,034	7.31%	1.59%	10,395	5,829,639	0.18%
Wyoming	575,324	10.30%	0.82%	1,280	574,043	0.22%
Washington DC	728,813	11.72%	5.87%	2,564	726,249	0.35%
<b>United States</b>	<b>333,094,933</b>	<b>18.84%</b>	<b>3.26%</b>	<b>1,472,512</b>	<b>331,622,421</b>	<b>0.44%</b>



**Table 4B: Statewide Population Projections for July 2021 With Undercount Rates Due to Citizenship Question**

State	Projected Population July 2021	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Population Estimate (as of July 2021) With Undercount	Statewide Undercount Percentage
Alabama	4,921,359	4.39%	0.88%	5,189	4,916,170	0.11%
Alaska	743,860	7.41%	3.95%	1,691	742,169	0.23%
Arizona	7,448,469	32.52%	2.34%	51,934	7,396,535	0.70%
Arkansas	3,057,619	8.18%	1.37%	5,838	3,051,780	0.19%
California	40,674,529	39.84%	5.09%	365,485	40,309,044	0.90%
Colorado	5,977,784	21.96%	2.42%	29,150	5,948,634	0.49%
Connecticut	3,572,232	17.68%	3.90%	15,421	3,556,811	0.43%
Delaware	999,168	9.86%	3.02%	2,575	996,592	0.26%
Florida	22,512,396	27.72%	3.68%	141,364	22,371,033	0.63%
Georgia	10,905,871	10.25%	3.14%	29,206	10,876,665	0.27%
Hawaii	1,440,733	11.11%	6.48%	5,068	1,435,665	0.35%
Idaho	1,838,472	12.98%	1.17%	5,202	1,833,270	0.28%
Illinois	12,695,472	17.98%	3.59%	54,767	12,640,705	0.43%
Indiana	6,766,096	7.60%	2.14%	13,183	6,752,912	0.19%
Iowa	3,199,934	6.47%	2.08%	5,476	3,194,458	0.17%
Kansas	2,931,301	12.60%	1.71%	8,389	2,922,912	0.29%
Kentucky	4,513,134	3.76%	1.32%	4,580	4,508,554	0.10%
Louisiana	4,732,077	5.75%	0.99%	6,383	4,725,694	0.13%
Maine	1,345,295	1.86%	1.05%	782	1,344,513	0.06%
Maryland	6,162,919	11.30%	3.75%	18,560	6,144,359	0.30%
Massachusetts	6,997,726	13.28%	6.75%	28,027	6,969,699	0.40%
Michigan	10,026,131	5.44%	3.19%	17,303	10,008,828	0.17%
Minnesota	5,745,639	5.67%	3.44%	10,476	5,735,163	0.18%
Mississippi	2,978,138	3.16%	0.54%	2,203	2,975,935	0.07%
Missouri	6,188,234	4.67%	1.66%	7,835	6,180,399	0.13%
Montana	1,092,463	4.17%	0.48%	1,015	1,091,448	0.09%
Nebraska	1,973,371	12.11%	2.20%	5,647	1,967,724	0.29%
Nevada	3,232,808	30.22%	3.16%	21,583	3,211,225	0.67%
New Hampshire	1,361,809	4.61%	2.86%	2,037	1,359,773	0.15%
New Jersey	9,089,741	21.97%	5.78%	50,448	9,039,293	0.56%
New Mexico	2,094,569	50.27%	0.99%	21,474	2,073,095	1.03%
New York	19,950,879	20.05%	5.67%	102,643	19,848,236	0.51%
North Carolina	10,731,238	9.94%	2.52%	26,740	10,704,498	0.25%
North Dakota	778,212	4.70%	2.74%	1,157	777,055	0.15%
Ohio	11,745,584	4.19%	1.88%	14,269	11,731,314	0.12%
Oklahoma	4,006,412	11.86%	1.30%	10,544	3,995,868	0.26%
Oregon	4,396,744	13.80%	2.60%	14,424	4,382,319	0.33%
Pennsylvania	12,825,822	8.49%	2.54%	28,299	12,797,524	0.22%
Rhode Island	1,066,145	17.43%	3.61%	4,488	1,061,657	0.42%
South Carolina	5,301,528	6.21%	1.17%	7,816	5,293,712	0.15%
South Dakota	897,255	3.92%	0.67%	824	896,432	0.09%
Tennessee	6,956,934	6.04%	1.74%	10,822	6,946,111	0.16%
Texas	30,194,983	40.51%	3.11%	263,417	29,931,566	0.87%
Utah	3,331,461	14.69%	2.13%	11,207	3,320,254	0.34%
Vermont	620,988	2.20%	1.97%	518	620,471	0.08%
Virginia	8,677,936	10.10%	3.37%	23,380	8,654,556	0.27%
Washington	7,908,519	13.45%	4.83%	28,906	7,879,613	0.37%
West Virginia	1,774,229	1.17%	0.82%	706	1,773,523	0.04%
Wisconsin	5,854,884	7.46%	1.63%	10,645	5,844,239	0.18%
Wyoming	573,993	10.40%	0.81%	1,286	572,707	0.22%
Washington DC	740,426	11.94%	6.09%	2,670	737,756	0.36%
<b>United States</b>	<b>335,553,518</b>	<b>19.09%</b>	<b>3.31%</b>	<b>1,503,050</b>	<b>334,050,468</b>	<b>0.45%</b>



Table 4C: Statewide Population Projections for July 2022 With Undercount Rates Due to Citizenship Question

State	Projected Population July 2022	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Statewide Undercount	Population Estimate (as of July 2022) With Citizenship Question	Statewide Undercount Percentage
Alabama	4,933,012	4.45%	0.88%	5,254	4,927,758	0.11%
Alaska	744,876	7.51%	4.13%	1,735	743,141	0.23%
Arizona	7,556,519	32.78%	2.33%	53,059	7,503,460	0.70%
Arkansas	3,070,953	8.36%	1.42%	6,007	3,064,947	0.20%
California	40,958,998	40.01%	5.13%	369,804	40,589,194	0.90%
Colorado	6,070,441	22.06%	2.46%	29,766	6,040,675	0.49%
Connecticut	3,568,244	18.07%	3.80%	15,612	3,552,632	0.44%
Delaware	1,008,475	10.00%	3.03%	2,627	1,005,848	0.26%
Florida	22,894,395	28.20%	3.70%	146,060	22,748,336	0.64%
Georgia	11,024,994	10.41%	3.20%	30,002	10,994,991	0.27%
Hawaii	1,444,032	11.25%	6.38%	5,091	1,438,940	0.35%
Idaho	1,868,854	13.10%	1.16%	5,330	1,863,524	0.29%
Illinois	12,668,835	18.16%	3.68%	55,346	12,613,489	0.44%
Indiana	6,790,915	7.77%	2.24%	13,592	6,777,324	0.20%
Iowa	3,213,489	6.61%	2.11%	5,606	3,207,883	0.17%
Kansas	2,935,846	12.79%	1.71%	8,511	2,927,335	0.29%
Kentucky	4,527,870	3.82%	1.32%	4,660	4,523,209	0.10%
Louisiana	4,744,012	5.89%	0.99%	6,526	4,737,486	0.14%
Maine	1,347,642	1.91%	0.98%	779	1,346,863	0.06%
Maryland	6,190,604	11.59%	3.68%	18,911	6,171,694	0.31%
Massachusetts	7,032,203	13.63%	6.93%	28,919	7,003,284	0.41%
Michigan	10,042,086	5.53%	3.32%	17,780	10,024,306	0.18%
Minnesota	5,787,898	5.76%	3.57%	10,800	5,777,097	0.19%
Mississippi	2,976,648	3.23%	0.54%	2,242	2,974,406	0.08%
Missouri	6,206,910	4.79%	1.72%	8,076	6,198,834	0.13%
Montana	1,102,956	4.28%	0.42%	1,036	1,101,920	0.09%
Nebraska	1,986,695	12.39%	2.29%	5,834	1,980,860	0.29%
Nevada	3,291,500	30.53%	3.16%	22,182	3,269,318	0.67%
New Hampshire	1,366,563	4.83%	2.96%	2,127	1,364,436	0.16%
New Jersey	9,110,765	22.35%	5.87%	51,407	9,059,358	0.56%
New Mexico	2,096,194	50.65%	0.99%	21,648	2,074,546	1.03%
New York	19,976,249	20.26%	5.62%	103,385	19,872,863	0.52%
North Carolina	10,845,692	10.07%	2.62%	27,528	10,818,164	0.25%
North Dakota	783,917	4.99%	2.88%	1,234	782,683	0.16%
Ohio	11,767,327	4.30%	1.92%	14,649	11,752,678	0.12%
Oklahoma	4,025,299	12.17%	1.30%	10,839	4,014,461	0.27%
Oregon	4,460,235	13.98%	2.61%	14,801	4,445,434	0.33%
Pennsylvania	12,830,894	8.78%	2.60%	29,206	12,801,688	0.23%
Rhode Island	1,067,771	17.93%	3.68%	4,616	1,063,155	0.43%
South Carolina	5,370,818	6.33%	1.16%	8,047	5,362,771	0.15%
South Dakota	904,152	4.00%	0.52%	818	903,334	0.09%
Tennessee	7,017,171	6.20%	1.79%	11,202	7,005,969	0.16%
Texas	30,667,580	40.77%	3.18%	269,554	30,398,025	0.88%
Utah	3,388,868	14.85%	2.18%	11,544	3,377,324	0.34%
Vermont	620,321	2.27%	1.99%	529	619,792	0.09%
Virginia	8,729,915	10.29%	3.38%	23,856	8,706,058	0.27%
Washington	8,034,213	13.62%	4.92%	29,783	8,004,430	0.37%
West Virginia	1,763,822	1.15%	0.87%	710	1,763,112	0.04%
Wisconsin	5,869,734	7.61%	1.67%	10,896	5,858,839	0.19%
Wyoming	572,663	10.49%	0.79%	1,291	571,371	0.23%
Washington DC	752,040	12.15%	6.31%	2,776	749,264	0.37%
<b>United States</b>	<b>338,012,104</b>	<b>19.33%</b>	<b>3.35%</b>	<b>1,533,593</b>	<b>336,478,511</b>	<b>0.45%</b>



Table 5: Select Urbanized Areas Population Projections for April 2020 With Undercount Rates Due to Citizenship Question

Urbanized Area	Projected Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Atlanta, GA Urbanized Area	5,290,847	11.97%	3.31%	16,169	5,274,678	0.31%
Houston, TX Urbanized Area	5,924,517	40.54%	11.00%	61,067	5,863,450	1.03%
Laredo, TX Urbanized Area	268,594	95.47%	19.42%	6,172	262,422	2.30%
Las Vegas--Henderson, NV Urbanized Area	2,241,788	32.76%	7.94%	18,247	2,223,540	0.81%
Los Angeles--Long Beach--Anaheim, CA Urbanized Area	12,765,635	47.08%	9.72%	145,015	12,620,620	1.14%
McAllen, TX Urbanized Area	835,516	92.91%	17.21%	18,402	817,113	2.20%
Miami, FL Urbanized Area	6,291,588	47.31%	12.60%	75,379	6,216,209	1.20%
Phoenix--Mesa, AZ Urbanized Area	4,237,700	30.61%	5.03%	30,205	4,207,495	0.71%
Texas portion of El Paso, TX--NM Urbanized Area	785,913	83.23%	13.24%	15,163	770,750	1.93%
New Jersey portion of New York--Newark, NY--NJ--CT Urbanized Area	6,348,055	23.33%	5.39%	36,463	6,311,592	0.57%
Maryland portion of Washington, DC--VA--MD Urbanized Area	1,875,855	19.05%	7.32%	9,893	1,865,962	0.53%



**Table 6: Select State Population Projections for April 2020 With Undercount Rates Due to Citizenship Question**

State	Projected Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Arizona	7,288,368	32.18%	2.37%	50,356	7,238,012	0.69%
California	40,222,359	39.63%	5.03%	359,227	39,863,132	0.89%
Florida	22,039,435	27.08%	3.66%	135,521	21,903,914	0.61%
Georgia	10,743,754	10.06%	3.06%	28,176	10,715,578	0.26%
Maryland	6,096,795	10.15%	4.03%	17,299	6,079,496	0.28%
Nevada	3,151,890	29.81%	3.16%	20,784	3,131,106	0.66%
New Jersey	8,992,841	20.65%	5.18%	46,454	8,946,387	0.52%
Texas	29,601,688	40.19%	3.01%	255,723	29,345,965	0.86%



# EXHIBIT B

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND**

ROBYN KRAVITZ, *et al.*

*Plaintiffs,*

v.

U.S. DEPARTMENT OF COMMERCE, *et al.*

*Defendants.*

Civil Action No. 8:18-cv-01041-GJH

Hon. George J. Hazel

LA UNIÓN DEL PUEBLO ENTERO; *et al.*

*Plaintiffs,*

v.

WILBUR L. ROSS, sued in his official capacity  
as U.S. Secretary of Commerce; *et al.*

*Defendants.*

Civil Action No. 8:18-cv-01570-GJH

Hon. George J. Hazel

**RULE 26(A)(2)(B) REBUTTAL REPORT AND DECLARATION OF KIMBALL W. BRACE**



**REBUTTAL REPORT AND DECLARATION OF KIMBALL W. BRACE  
OCTOBER 26, 2018**

**I. INTRODUCTION**

I have reviewed the expert report submitted by Dr. Stuart Gurrea on behalf of the Government. Dr. Gurrea's report disputes the undercount assumptions that I relied on for purposes of the calculations presented in the expert report that I submitted in this matter on October 5, 2018 ("October 5 Report"). However, he does not otherwise dispute the calculations or methodology in my October 5 Report.

Based on different undercount assumptions, Dr. Gurrea calculates smaller impacts resulting from the citizenship question, though his calculations still suggest a reduction in (i) the percentage share of statewide population for counties in which plaintiffs reside; (ii) the percentage share of the nationwide population for states in which plaintiffs reside; and (iii) the percentage share of statewide population for urbanized areas in which plaintiffs reside. Because the undercount assumptions in my October 5 Report and in Dr. Gurrea's report are beyond the scope of my opinions, I do not address the merits of those assumptions here. However, I submit this rebuttal report to provide several additional calculations that show the impact of the citizenship question under a wider range of undercount assumptions, including some of those used in Dr. Gurrea's report.<sup>1</sup>

**II. CALCULATIONS**

**A. Vote Dilution**

My initial Tables 3A, 3B, and 3C had calculated the reduction in the share of the statewide population for various counties across the United States, with undercount scenarios of 2%, 5.8%, and 8.09% as to all Hispanics and non-citizens. To challenge my calculations, Dr. Gurrea projected the populations of these counties with a 2%, 5.8%, and 8.09% undercount as to all Hispanics and non-citizens, but mitigated with a NRFU success rate of 98.58% ("Historical NRFU Rate"). Based on his calculations, Dr. Gurrea claimed that in all of these undercount scenarios, each county's share of the statewide population is "at most one tenth of one percent." His Table 4 appears to indicate that for many counties, the effect is actually 0.0%. In response to this, I have performed the following additional calculations.

*First*, I note that Dr. Gurrea only provided an estimation at one decimal point. I have

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<sup>1</sup> Due to my schedule and the limited time available to prepare this rebuttal report, I have relied on Ashenfelter & Ashmore to assist in performing these additional calculations.



reformatted his calculations out to 3 decimal points, which show an effect for almost every county in question under the three undercount scenarios considered by Dr. Gurrea. Put another way, there is a percentage reduction in the statewide share of the population for almost every county, even under his calculations. *See Gurrea's Table 4 Reformatted.*

**Second**, for several plaintiffs, if one looks at a smaller unit of geography, the effect on vote dilution is even clearer. Especially for those who live in large counties that contain multiple legislative districts (Clark County, for example), it is more appropriate to look at smaller geographies to evaluate the vote dilution effect. I have replicated my original Table 3 for a smaller unit of geography, the PUMA.<sup>2</sup> *See Tables 3A.1, 3B.1, and 3C.1.* For many PUMAs, you can see that the effect of vote dilution is even stronger than seen at their respective county level. And almost all PUMAs experience a vote dilution effect.<sup>3</sup>

**Third**, using ACS PUMS microdata samples allows us to consider the impact of a citizenship question on the undercount of individuals living in non-citizen households regardless of whether they are themselves non-citizens. I understand that the Census Bureau has projected that these individuals will suffer from a differentially low self-response rate due to the citizenship question.<sup>4</sup> Thus, I have replicated these tables with an additional undercount of individuals living in non-citizen households (who are not Hispanic or non-citizens themselves).<sup>5</sup> I applied the undercount scenarios to this group as well to produce Tables 3A.2, 3B.2, and 3C.2. This shows an even greater degree of vote dilution for many PUMAs.

**Fourth**, I note that in calculating the effect of a 2% undercount with the Historical NRFU Rate based on Dr. Mathiowetz's estimates, Dr. Gurrea mistakenly applies a 1 percentage point reduction only to *non-Hispanic* non-citizens rather than to *all* non-citizens. I have revised Dr. Gurrea's calculations to apply the resulting 1.08% undercount

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<sup>2</sup> The PUMA is the Public Use Microdata Areas, which are used for disseminating ACS period estimates. They nest within states and contain at least 100,000 people. *See* "Public Use Microdata Areas (PUMAs)," U.S. Census Bureau, <https://www.census.gov/geo/reference/puma.html>.

<sup>3</sup> Although this appears to reduce the vote dilution effect for the plaintiffs in Santa Cruz and Todd County, that is because the PUMA is actually bigger than the county itself.

<sup>4</sup> *See* J. David Brown, Misty L. Heggeness, Suzanne M. Dorinki, Lawrence Warren and Moises Yi, "Understanding the Quality of Alternative Citizenship Data Sources for the 2020 Census," August 6, 2018, pp. 35, 39.

<sup>5</sup> My original Tables 3A, 3B, and 3C calculated the undercount among Hispanics and non-Hispanic non-citizens (two demographic groups that I separated out so as to avoid the double-counting of Hispanic non-citizens). In this recreation of my tables, I include the demographic group of non-Hispanic citizens living with non-citizens, which is also meant to prevent an overlap with the first two demographic groups.



to *all* non-citizens at the county level (the 1% undercount for all non-citizens plus a 5.8% undercount of non-citizens mitigated by the Historical NRFU Rate) and then a 0.14% undercount of Hispanic citizens at the county level (the 10% undercount for Hispanics, mitigated by the Historical NRFU Rate). *See* Revised Gurrea Table 4. This shows a greater degree of vote dilution than suggested by Dr. Gurrea's original calculation. I also recreated these tables at the PUMA level to show the added effect of a 0.08% undercount of individuals living in non-citizen households (a 5.8% undercount mitigated by the Historical NRFU Rate) in addition to the 1.08% undercount for non-citizens and 0.14% undercount for Hispanic citizens. *See* Table 3D.

***Fifth***, I re-created Table 3 under two undercount scenarios that are consistent with the Government's own statements and/or Dr. Gurrea's report. I first used a 5.8% undercount for individuals living in non-citizen households (as projected in the Brown et al. memo), mitigated by the Historical NRFU Rate. Even under this assumption, a vote dilution effect is observable in many PUMAs where plaintiffs reside. *See* Table 3E. I also re-created Table 3 with just a 0.5% undercount of non-citizens (and with no undercount for Hispanic citizens). *See* Table 3F. I understand that the Government has acknowledged that some number of noncitizens in households will not be enumerated and will not go into NRFU. Using the low end of Dr. Mathiowetz's estimate of the undercount of noncitizens attributable to this phenomenon (0.5%), a vote dilution effect is still observable in many PUMAs where plaintiffs reside.

***Finally***, my initial Tables 2A, 2B, and 2C showed the effect on congressional reapportionment under the three undercount scenarios. I have replicated Table 2 with the percent of non-Hispanic citizens living with non-citizens, for the reasons discussed above.<sup>6</sup> *See* Tables 2A.1, 2B.1, and 2C.1. These tables show that there is still a reapportionment effect, including in California.

## **B. Medicaid Funding**

For the purposes of evaluating the effect of a 2% undercount on Medicaid funding, my initial Tables 4A, 4B, and 4C projected the populations of states with a 2% undercount of Hispanics and a 2% undercount of non-Hispanic, non-citizens. To challenge the

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<sup>6</sup> The percent Hispanic and the percent non-Hispanic, non-citizen in these tables (as well as the other tables I provide with this report) vary slightly from the percentages I provided in Table 2 (and my other original tables). The ACS summary files at the state level, which I used for the construction of Table 2, do not include data to allow for the calculation of the percent of non-Hispanic citizens living with non-citizens. It was necessary to use ACS PUMS data (which is at the individual level) to calculate that number. For the sake of using a consistent data set for all the percentages, ACS PUMS data was used across the board.



calculations of plaintiffs' retained expert Lisa Carruth, which relied on my initial Tables 4A, 4B, and 4C, Dr. Gurrea estimated the reduction in the Texas FMAP for FY2025 with a 2% undercount, but mitigated by the Historical NRFU Rate. For this rebuttal report, I performed the following re-calculations to show that even under a range of undercount assumptions consistent with the government's own statements and/or Dr. Gurrea's report, there will be an effect on Medicaid funding.

**First**, I re-calculated my initial Tables 4A, 4B, and 4C using Dr. Gurrea's corrected undercount calculation based on Dr. Mathiowetz's analysis – a 1.08% undercount for non-citizens and a 0.14% undercount for Hispanics. *See* Tables 4A.1, 4B.1, and 4C.1.

**Second**, I re-calculated my initial Tables 4A, 4B, and 4C using a 5.8% undercount for individuals living in non-citizen households (as projected in the Brown et al. memo), mitigated by the Historical NRFU Rate. *See* Table 4A.2, 4B.2, and 4C.2.

**Third**, I re-calculated my initial Tables 4A, 4B, and 4C with just a 0.5% undercount of non-citizens (and with no undercount for Hispanic citizens). *See* Tables 4A.3, 4B.3, and 4C.3.

### **C. Transportation Funding**

For purposes of evaluating the effect of a 2% undercount on transportation funding, (1) my initial Table 5 projected the populations of select urbanized areas with a 2% undercount of Hispanics and a 2% undercount of non-Hispanic, non-citizens; and (2) my initial Table 6 projected the populations of select states with a 2% undercount of Hispanics and a 2% undercount of non-Hispanic, non-citizens. I noticed an error in Table 5 in the calculation of the percent non-Hispanic, non-citizen, which I have corrected in the revised Table 5, attached to this report.

To challenge the calculations of plaintiffs' retained expert Roger Mingo, which relied on my initial Tables 5 and 6, Dr. Gurrea estimated the reduction in the transportation funding for select urbanized areas with a 2% undercount, but mitigated by the Historical NRFU Rate. For this rebuttal report, I performed the following re-calculations to show that even under a range of undercount assumptions consistent with the government's own statements and/or Dr. Gurrea's report, there will be an effect on transportation funding.

**First**, I re-calculated my initial Tables 5 and 6 using Dr. Gurrea's corrected undercount calculation based on Dr. Mathiowetz's analysis – a 1.08% undercount for non-citizens and a 0.14% undercount for Hispanics. *See* Revised Gurrea Table 6.

**Second**, I re-calculated my initial Tables 5 and 6 using a 5.8% undercount for individuals living in non-citizen households (as projected in the Brown et al. memo),



mitigated by the Historical NRFU Rate. *See* Table 5.1; Table 6.1.

***Third***, I re- calculated my initial Tables 5 and 6 with just a 0.5% undercount of non-citizens (and with no undercount for Hispanic citizens). *See* Table 5.2; 6.2.

\* \* \*

I reserve the right to supplement this report if I become aware of additional information or documentation that would require further analysis and any modification or addition to my opinions as stated herein.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in black ink that reads "Kimball W. Brace". The signature is written in a cursive, flowing style.

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Kimball William Brace

Executed on October 26, 2018 in Washington, D.C.

**Table 4 (Reformatted)**  
**Select Counties' Projections with Citizenship Question and Historical NRFU, Before Imputation**

		<i>Mathiowetz 2% Undercount with Historical NRFU</i>		<i>5.8% Undercount with Historical NRFU</i>		<i>8.09% Undercount with Historical NRFU</i>	
State	County	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population
Arizona	Maricopa County	-0.002%	-0.004%	0.000%	0.000%	0.000%	0.000%
	Santa Cruz County	0.000%	-0.054%	0.000%	-0.042%	0.000%	-0.058%
	Yuma County	-0.001%	-0.047%	-0.001%	-0.027%	-0.001%	-0.038%
	Rest of State	0.004%	0.012%	0.001%	0.003%	0.002%	0.004%
California	Los Angeles County	-0.004%	-0.015%	-0.002%	-0.008%	-0.003%	-0.011%
	Rest of State	0.004%	0.005%	0.002%	0.003%	0.003%	0.004%
Florida	Miami-Dade County	-0.008%	-0.061%	-0.005%	-0.035%	-0.007%	-0.049%
	Rest of State	0.008%	0.009%	0.005%	0.005%	0.007%	0.008%
Maryland	Prince George's County	-0.003%	-0.019%	-0.001%	-0.007%	-0.002%	-0.010%
	Rest of State	0.003%	0.003%	0.001%	0.001%	0.002%	0.002%
Nevada	Clark County	-0.006%	-0.008%	-0.002%	-0.002%	-0.002%	-0.003%
	Rest of State	0.006%	0.022%	0.002%	0.007%	0.002%	0.009%
New Jersey	Hudson County	-0.008%	-0.101%	-0.002%	-0.024%	-0.003%	-0.034%
	Rest of State	0.008%	0.009%	0.002%	0.002%	0.003%	0.003%
South Dakota	Todd County	-0.001%	-0.116%	0.000%	-0.010%	0.000%	-0.014%
	Rest of State	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%
Texas	Dallas County	-0.001%	-0.012%	0.000%	-0.001%	0.000%	-0.002%
	El Paso County	-0.001%	-0.041%	-0.001%	-0.034%	-0.001%	-0.047%
	Harris County	-0.004%	-0.024%	-0.001%	-0.004%	-0.001%	-0.006%
	Hidalgo County	-0.002%	-0.050%	-0.001%	-0.042%	-0.002%	-0.058%
	Webb County	-0.001%	-0.054%	0.000%	-0.044%	-0.001%	-0.062%
	Rest of State	0.008%	0.013%	0.004%	0.005%	0.005%	0.007%
Washington	King County	-0.014%	-0.048%	0.000%	-0.001%	-0.001%	-0.002%
	Rest of State	0.014%	0.020%	0.000%	0.001%	0.001%	0.001%

Sources:

1. Brace Report.
2. NRFU Success Rate.docx

Note: Baseline population, percent Hispanic and percent non-Hispanic/non-citizen are rounded.



Table 3A.1: Select PUMAs' Projections with 2% Undercount Due to Citizenship Question  
Version 1: Undercount for Hispanics and Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	154,344	1.500%	2.132%	-0.017%	-0.809%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	165,570	1.020%	2.288%	-0.007%	-0.326%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	209,115	1.374%	2.889%	-0.020%	-0.682%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	6,708,859	0.648%	92.691%	0.045%	0.048%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	211,132	1.261%	0.530%	-0.002%	-0.371%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	197,492	1.442%	0.495%	-0.003%	-0.554%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	39,454,624	0.889%	98.975%	0.005%	0.005%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	102,982	1.803%	0.470%	-0.006%	-1.195%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	144,727	1.110%	0.661%	-0.003%	-0.497%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	21,654,152	0.607%	98.869%	0.009%	0.009%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	189,429	0.275%	3.103%	0.001%	0.021%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	128,645	0.165%	2.107%	0.003%	0.132%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	120,261	1.228%	1.970%	-0.019%	-0.934%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	91,927	0.774%	1.506%	-0.007%	-0.479%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	5,575,229	0.272%	91.315%	0.022%	0.025%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	136,143	1.163%	4.347%	-0.022%	-0.501%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	2,995,463	0.643%	95.653%	0.022%	0.023%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	139,542	1.057%	1.547%	-0.008%	-0.515%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	8,878,971	0.537%	98.453%	0.008%	0.008%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	99,799	0.022%	11.285%	0.009%	0.083%
		Rest of State		785,429	88.724%	4.436%	1.355%	784,519	0.116%	88.715%	-0.009%	-0.011%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	101,954	0.885%	0.347%	0.000%	-0.019%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	87,324	1.826%	0.298%	-0.003%	-0.968%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	116,101	1.265%	0.396%	-0.002%	-0.403%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	124,122	0.830%	0.423%	0.000%	0.036%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	115,944	1.806%	0.395%	-0.004%	-0.949%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	137,592	1.711%	0.469%	-0.004%	-0.852%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	134,657	1.958%	0.459%	-0.005%	-1.102%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	136,076	1.945%	0.464%	-0.005%	-1.088%
Washington		Rest of State		28,634,150	96.728%	39.064%	3.081%	28,392,792	0.843%	96.750%	0.022%	0.023%
	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	138,159	0.508%	1.791%	-0.003%	-0.144%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	181,678	0.199%	2.356%	0.004%	0.165%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	120,133	0.736%	1.558%	-0.006%	-0.373%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	7,272,365	0.359%	94.295%	0.005%	0.005%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the level change from 2014 to 2017, rather than the growth rate.

Table 3B.1: Select PUMAs' Projections with 5.8% Undercount Due to Citizenship Question  
Version 1: Undercount for Hispanics and Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	149,878	4.350%	2.099%	-0.051%	-2.379%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	162,327	2.959%	2.273%	-0.022%	-0.959%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	203,579	3.985%	2.851%	-0.058%	-2.006%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	6,625,672	1.880%	92.778%	0.131%	0.142%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	206,008	3.658%	0.526%	-0.006%	-1.095%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	192,001	4.183%	0.490%	-0.008%	-1.634%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	38,782,460	2.577%	98.984%	0.014%	0.014%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	99,389	5.228%	0.459%	-0.017%	-3.506%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	141,640	3.219%	0.654%	-0.010%	-1.460%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	21,403,062	1.759%	98.886%	0.026%	0.027%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	188,436	0.798%	3.104%	0.002%	0.062%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	128,242	0.478%	2.112%	0.008%	0.384%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	117,420	3.561%	1.934%	-0.054%	-2.725%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	90,565	2.245%	1.492%	-0.021%	-1.398%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	5,546,364	0.788%	91.358%	0.065%	0.072%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	133,099	3.373%	4.305%	-0.064%	-1.472%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	2,958,642	1.864%	95.695%	0.064%	0.067%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	136,709	3.066%	1.532%	-0.023%	-1.509%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	8,787,896	1.557%	98.468%	0.023%	0.024%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	99,756	0.065%	11.303%	0.027%	0.241%
		Rest of State		785,429	88.724%	4.436%	1.355%	782,791	0.336%	88.697%	-0.027%	-0.031%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	100,224	2.566%	0.347%	0.000%	-0.057%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	84,238	5.295%	0.292%	-0.009%	-2.856%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	113,275	3.669%	0.393%	-0.005%	-1.188%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	122,149	2.406%	0.423%	0.000%	0.107%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	111,891	5.238%	0.388%	-0.011%	-2.797%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	133,042	4.962%	0.461%	-0.012%	-2.513%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	129,546	5.679%	0.449%	-0.015%	-3.250%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	130,949	5.639%	0.454%	-0.015%	-3.208%
Washington		Rest of State		28,634,150	96.728%	39.064%	3.081%	27,934,210	2.444%	96.794%	0.066%	0.068%
	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	136,819	1.473%	1.786%	-0.008%	-0.422%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	180,988	0.578%	2.363%	0.011%	0.483%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	118,441	2.134%	1.546%	-0.017%	-1.090%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	7,222,535	1.042%	94.304%	0.013%	0.014%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the *level* change from 2014 to 2017, rather than the growth *rate*.



Table 3C.1: Select PUMAs' Projections with 8.09% Undercount Due to Citizenship Question  
Version 1: Undercount for Hispanics and Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	147,187	6.068%	2.078%	-0.072%	-3.345%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	160,373	4.127%	2.264%	-0.031%	-1.348%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	200,243	5.558%	2.827%	-0.082%	-2.821%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	6,575,541	2.623%	92.831%	0.185%	0.200%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	202,919	5.102%	0.523%	-0.008%	-1.544%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	188,692	5.834%	0.487%	-0.011%	-2.303%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	38,377,392	3.595%	98.990%	0.020%	0.020%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	97,224	7.293%	0.452%	-0.023%	-4.925%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	139,780	4.490%	0.650%	-0.014%	-2.051%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	21,251,746	2.454%	98.897%	0.037%	0.037%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	187,838	1.112%	3.105%	0.003%	0.087%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	127,999	0.667%	2.116%	0.011%	0.538%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	115,709	4.966%	1.912%	-0.076%	-3.814%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	89,744	3.131%	1.483%	-0.030%	-1.956%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	5,528,970	1.099%	91.384%	0.091%	0.100%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	131,264	4.705%	4.279%	-0.090%	-2.069%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	2,936,452	2.600%	95.721%	0.090%	0.095%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	135,002	4.276%	1.522%	-0.033%	-2.118%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	8,733,011	2.172%	98.478%	0.033%	0.033%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	99,731	0.090%	11.314%	0.038%	0.337%
		Rest of State		785,429	88.724%	4.436%	1.355%	781,749	0.469%	88.686%	-0.038%	-0.043%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	99,182	3.580%	0.347%	0.000%	-0.080%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	82,378	7.386%	0.288%	-0.012%	-4.024%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	111,571	5.118%	0.391%	-0.007%	-1.674%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	120,960	3.356%	0.423%	0.001%	0.151%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	109,449	7.307%	0.383%	-0.016%	-3.942%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	130,299	6.920%	0.456%	-0.017%	-3.542%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	126,467	7.922%	0.443%	-0.021%	-4.580%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	127,860	7.866%	0.448%	-0.021%	-4.521%
Washington		Rest of State		28,634,150	96.728%	39.064%	3.081%	27,657,856	3.410%	96.821%	0.093%	0.096%
	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	136,011	2.055%	1.783%	-0.011%	-0.591%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	180,573	0.806%	2.368%	0.016%	0.677%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	117,421	2.977%	1.540%	-0.024%	-1.526%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	7,192,505	1.454%	94.309%	0.019%	0.020%

## Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the *level* change from 2014 to 2017, rather than the growth *rate*.

Table 3A.2: Select PUMAs' Projections with 2% Undercount Due to Citizenship Question  
Version 2: Undercount for Hispanics, Non-Citizens, and People in Households with Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Percent Non-Hispanic, Citizen, Living With Non-Citizens	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	9.639%	154,042	1.693%	2.129%	-0.021%	-0.967%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	1.486%	165,520	1.050%	2.288%	-0.007%	-0.319%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	0.971%	209,074	1.393%	2.890%	-0.019%	-0.665%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	1.696%	6,706,568	0.682%	92.694%	0.047%	0.051%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	4.050%	210,959	1.342%	0.530%	-0.002%	-0.358%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	2.603%	197,388	1.494%	0.496%	-0.003%	-0.512%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	4.734%	39,416,932	0.983%	98.975%	0.004%	0.004%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	1.094%	102,959	1.825%	0.470%	-0.005%	-1.143%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	3.277%	144,631	1.176%	0.661%	-0.003%	-0.489%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	3.740%	21,637,854	0.681%	98.869%	0.009%	0.009%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	7.232%	189,154	0.420%	3.100%	-0.002%	-0.049%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	3.928%	128,544	0.243%	2.107%	0.003%	0.128%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	7.727%	120,072	1.382%	1.968%	-0.020%	-1.015%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	2.773%	91,876	0.829%	1.506%	-0.007%	-0.461%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	3.525%	5,571,288	0.342%	91.319%	0.026%	0.028%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	1.330%	136,107	1.190%	4.349%	-0.020%	-0.467%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	3.086%	2,993,602	0.705%	95.651%	0.020%	0.021%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	7.331%	139,335	1.204%	1.547%	-0.009%	-0.559%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	5.109%	8,869,849	0.639%	98.453%	0.009%	0.009%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	2.587%	99,747	0.074%	11.284%	0.008%	0.073%
		Rest of State		785,429	88.724%	4.436%	1.355%	1.995%	784,206	0.156%	88.716%	-0.008%	-0.009%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	9.682%	101,755	1.079%	0.347%	-0.001%	-0.163%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	0.206%	87,320	1.830%	0.298%	-0.003%	-0.922%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	2.843%	116,034	1.322%	0.396%	-0.002%	-0.409%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	4.706%	124,005	0.924%	0.423%	0.000%	-0.007%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	4.618%	115,835	1.899%	0.395%	-0.004%	-0.991%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	3.602%	137,491	1.783%	0.469%	-0.004%	-0.874%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	1.414%	134,618	1.987%	0.459%	-0.005%	-1.080%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	0.244%	136,070	1.949%	0.464%	-0.005%	-1.042%
		Rest of State		28,634,150	96.728%	39.064%	3.081%	2.526%	28,378,324	0.893%	96.750%	0.023%	0.024%
Washington	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	13.603%	137,781	0.780%	1.788%	-0.006%	-0.335%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	7.644%	181,399	0.352%	2.354%	0.002%	0.095%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	4.973%	120,013	0.835%	1.557%	-0.006%	-0.390%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	3.849%	7,266,747	0.436%	94.301%	0.010%	0.010%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the level change from 2014 to 2017, rather than the growth rate.



Table 3B.2: Select PUMAs' Projections with 5.8% Undercount Due to Citizenship Question  
Version 2: Undercount for Hispanics, Non-Citizens, and People in Households with Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Percent Non-Hispanic, Citizen, Living With Non-Citizens	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	9.639%	149,002	4.909%	2.089%	-0.061%	-2.844%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	1.486%	162,183	3.045%	2.273%	-0.022%	-0.939%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	0.971%	203,460	4.041%	2.852%	-0.057%	-1.957%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	1.696%	6,619,029	1.979%	92.786%	0.140%	0.151%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	4.050%	205,505	3.893%	0.526%	-0.006%	-1.058%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	2.603%	191,699	4.333%	0.491%	-0.008%	-1.512%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	4.734%	38,673,156	2.852%	98.983%	0.013%	0.013%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	1.094%	99,323	5.292%	0.460%	-0.016%	-3.358%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	3.277%	141,362	3.409%	0.655%	-0.010%	-1.436%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	3.740%	21,355,798	1.976%	98.886%	0.026%	0.026%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	7.232%	187,640	1.217%	3.097%	-0.004%	-0.144%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	3.928%	127,948	0.706%	2.112%	0.008%	0.373%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	7.727%	116,875	4.009%	1.929%	-0.059%	-2.966%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	2.773%	90,416	2.405%	1.493%	-0.020%	-1.345%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	3.525%	5,534,936	0.992%	91.369%	0.076%	0.083%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	1.330%	132,993	3.450%	4.309%	-0.060%	-1.375%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	3.086%	2,953,245	2.043%	95.691%	0.060%	0.063%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	7.331%	136,110	3.491%	1.530%	-0.026%	-1.643%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	5.109%	8,761,442	1.854%	98.470%	0.026%	0.026%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	2.587%	99,607	0.215%	11.300%	0.024%	0.211%
		Rest of State		785,429	88.724%	4.436%	1.355%	1.995%	781,882	0.452%	88.700%	-0.024%	-0.027%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	9.682%	99,647	3.128%	0.346%	-0.002%	-0.482%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	0.206%	84,227	5.307%	0.292%	-0.008%	-2.720%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	2.843%	113,081	3.834%	0.392%	-0.005%	-1.207%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	4.706%	121,808	2.679%	0.423%	0.000%	-0.021%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	4.618%	111,575	5.506%	0.387%	-0.012%	-2.925%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	3.602%	132,749	5.170%	0.461%	-0.012%	-2.580%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	1.414%	129,434	5.761%	0.449%	-0.015%	-3.187%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	0.244%	130,930	5.653%	0.454%	-0.014%	-3.076%
		Rest of State		28,634,150	96.728%	39.064%	3.081%	2.526%	27,892,256	2.591%	96.795%	0.068%	0.070%
Washington	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	13.603%	135,723	2.262%	1.776%	-0.018%	-0.979%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	7.644%	180,181	1.021%	2.358%	0.007%	0.278%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	4.973%	118,092	2.423%	1.546%	-0.018%	-1.142%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	3.849%	7,206,243	1.265%	94.320%	0.029%	0.031%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the level change from 2014 to 2017, rather than the growth rate.

Table 3C.2: Select PUMAs' Projections with 8.09% Undercount Due to Citizenship Question  
Version 2: Undercount for Hispanics, Non-Citizens, and People in Households with Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Percent Non-Hispanic, Citizen, Living With Non-Citizens	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	67.314%	7.690%	9.639%	145,965	6.848%	2.064%	-0.086%	-4.001%
	900	Nogales	Santa Cruz	167,276	2.295%	49.638%	1.373%	1.486%	160,172	4.247%	2.265%	-0.030%	-1.321%
	700	Somerton	Yuma	212,028	2.909%	65.996%	2.707%	0.971%	200,077	5.637%	2.829%	-0.080%	-2.753%
		Rest of State		6,752,641	92.646%	29.898%	2.521%	1.696%	6,566,275	2.760%	92.842%	0.196%	0.212%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	60.876%	2.190%	4.050%	202,219	5.430%	0.524%	-0.008%	-1.494%
	3744	Los Angeles	Los Angeles	200,382	0.498%	65.606%	6.507%	2.603%	188,270	6.044%	0.488%	-0.011%	-2.134%
		Rest of State		39,808,392	98.970%	39.374%	5.061%	4.734%	38,224,936	3.978%	98.989%	0.019%	0.019%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	88.981%	1.163%	1.094%	97,132	7.381%	0.453%	-0.022%	-4.721%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	52.063%	3.437%	3.277%	139,392	4.755%	0.651%	-0.013%	-2.020%
		Rest of State		21,786,306	98.860%	26.595%	3.735%	3.740%	21,185,820	2.756%	98.896%	0.036%	0.036%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	9.906%	3.844%	7.232%	186,727	1.698%	3.096%	-0.006%	-0.201%
	1104	District Heights	Prince Georges	128,858	2.104%	4.509%	3.732%	3.928%	127,589	0.984%	2.115%	0.011%	0.523%
	1101	Hyattsville	Prince Georges	121,756	1.988%	54.892%	6.498%	7.727%	114,947	5.592%	1.906%	-0.083%	-4.155%
	1103	Hyattsville	Prince Georges	92,644	1.513%	36.158%	2.542%	2.773%	89,536	3.355%	1.484%	-0.029%	-1.884%
		Rest of State		5,590,421	91.293%	9.837%	3.750%	3.525%	5,513,029	1.384%	91.399%	0.106%	0.117%
Nevada	406	Las Vegas	Clark	137,745	4.369%	54.557%	3.604%	1.330%	131,116	4.813%	4.285%	-0.084%	-1.934%
		Rest of State		3,014,843	95.631%	28.711%	3.429%	3.086%	2,928,924	2.850%	95.715%	0.085%	0.088%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.753%	24.102%	7.331%	134,166	4.869%	1.519%	-0.036%	-2.309%
		Rest of State		8,926,906	98.445%	21.373%	5.476%	5.109%	8,696,112	2.585%	98.481%	0.036%	0.036%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.513%	0.604%	2.587%	99,522	0.300%	11.309%	0.033%	0.295%
		Rest of State		785,429	88.724%	4.436%	1.355%	1.995%	780,482	0.630%	88.691%	-0.033%	-0.037%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.724%	0.524%	9.682%	98,376	4.363%	0.345%	-0.002%	-0.679%
	3304	El Paso	El Paso	88,948	0.300%	90.923%	0.375%	0.206%	82,363	7.403%	0.289%	-0.012%	-3.836%
	4612	Houston	Harris	117,589	0.397%	61.276%	1.983%	2.843%	111,301	5.348%	0.390%	-0.007%	-1.702%
	4613	Houston	Harris	125,161	0.423%	27.033%	14.456%	4.706%	120,484	3.737%	0.423%	0.000%	-0.029%
	6804	Edinburg	Hidalgo	118,076	0.399%	87.919%	2.397%	4.618%	109,008	7.680%	0.382%	-0.016%	-4.124%
	6805	McAllen	Hidalgo	139,987	0.473%	85.075%	0.468%	3.602%	129,891	7.212%	0.456%	-0.017%	-3.638%
	6803	Pharr	Hidalgo	137,347	0.464%	97.819%	0.103%	1.414%	126,309	8.036%	0.443%	-0.021%	-4.494%
	6301	Laredo	Webb	138,775	0.469%	95.823%	1.403%	0.244%	127,832	7.885%	0.448%	-0.020%	-4.337%
		Rest of State		28,634,150	96.728%	39.064%	3.081%	2.526%	27,599,336	3.614%	96.823%	0.096%	0.099%
Washington	11611	SeaTac	King	138,865	1.794%	12.780%	12.621%	13.603%	134,483	3.155%	1.769%	-0.025%	-1.373%
	11604	Seattle	King	182,041	2.352%	4.076%	5.891%	7.644%	179,447	1.425%	2.361%	0.009%	0.389%
	11606	Shoreline	King	121,024	1.564%	16.273%	20.524%	4.973%	116,934	3.379%	1.538%	-0.025%	-1.601%
		Rest of State		7,298,592	94.291%	13.425%	4.542%	3.849%	7,169,781	1.765%	94.331%	0.041%	0.043%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA. Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

In general, projections rely on the growth rate observed from 2014 to 2017, which is used in turn to project forward from 2017 to April 1, 2020. However, in the 2014 ACS, PUMA #6804 has zero "Non-Hispanic Non-Citizens" records; consequently, the growth rate of that figure would be infinite using the described method. Therefore, for this observation only, projections are based on the level change from 2014 to 2017, rather than the growth rate.



**Revised Gurrea Table 4**  
**Select Counties' Projections with Citizenship Question and Historical NRFU, Before Imputation**  
**Correcting Application of "Mathiowetz 2% Undercount" Calculation**

		<i>Mathiowetz 2% Undercount with Historical NRFU</i>	
State	County	Absolute Change in Statewide Share of Population	Percentage Change in Statewide Share of Population
Arizona	Maricopa County	-0.005%	-0.009%
	Santa Cruz County	-0.001%	-0.111%
	Yuma County	-0.004%	-0.121%
	Rest of State	0.010%	0.028%
California	Los Angeles County	-0.010%	-0.040%
	Rest of State	0.010%	0.014%
Florida	Miami-Dade County	-0.025%	-0.184%
	Rest of State	0.025%	0.028%
Maryland	Prince George's County	-0.010%	-0.065%
	Rest of State	0.010%	0.012%
Nevada	Clark County	-0.011%	-0.015%
	Rest of State	0.011%	0.043%
New Jersey	Hudson County	-0.013%	-0.168%
	Rest of State	0.013%	0.014%
South Dakota	Todd County	-0.001%	-0.114%
	Rest of State	0.001%	0.001%
Texas	Dallas County	-0.005%	-0.059%
	El Paso County	-0.003%	-0.090%
	Harris County	-0.011%	-0.066%
	Hidalgo County	-0.005%	-0.152%
	Webb County	-0.001%	-0.143%
	Rest of State	0.025%	0.038%
Washington	King County	-0.014%	-0.045%
	Rest of State	0.014%	0.019%

Sources:

1. Brace Report.
2. NRFU Success Rate.docx

Note: Baseline population, percent Hispanic and percent non-Hispanic/non-citizen are rounded.

REVISION NOTE: This table was modified by using the percent of non-citizens rather than the percent of non-Hispanic non-citizens when calculating the "Mathiowetz 2% Undercount with Historical NRFU"

Table 3D: Select PUMAs' Projections with Varying Undercount Due to Citizenship Question  
 1.08% Undercount for Non-Citizens, 10% Undercount for Hispanics (Mitigated with 98.58% NRFU), 5.8% Undercount for Citizens living with non-Citizens (Mitigated with 98.58% NRFU)

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Non-Citizen	Percent Hispanic Citizen	Percent Non-Hispanic Citizen Living With Non-Citizens	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
						1.08% Undercount	0.14% Undercount	0.08% Undercount					
Arizona	121	Phoenix	Maricopa	156,695	2.150%	22.579%	50.314%	9.639%	156,187	0.324%	2.145%	-0.004%	-0.207%
	900	Nogales	Santa Cruz	167,276	2.295%	5.686%	45.745%	1.486%	167,063	0.128%	2.295%	0.000%	-0.010%
	700	Somerton	Yuma	212,028	2.909%	15.636%	53.093%	0.971%	211,508	0.245%	2.905%	-0.004%	-0.128%
		Rest of State		6,752,641	92.646%	6.455%	26.107%	1.696%	6,745,326	0.108%	92.655%	0.008%	0.009%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	13.355%	49.848%	4.050%	213,361	0.219%	0.531%	0.000%	-0.036%
	3744	Los Angeles	Los Angeles	200,382	0.498%	21.342%	51.394%	2.603%	199,769	0.306%	0.498%	-0.001%	-0.124%
		Rest of State		39,808,392	98.970%	12.202%	32.326%	4.734%	39,735,992	0.182%	98.971%	0.001%	0.001%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	29.677%	60.605%	1.094%	104,444	0.408%	0.475%	-0.001%	-0.274%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	22.780%	32.259%	3.277%	145,919	0.295%	0.663%	-0.001%	-0.161%
		Rest of State		21,786,306	98.860%	9.113%	21.258%	3.740%	21,757,568	0.132%	98.862%	0.002%	0.002%
Maryland	1105	Bowie	Prince George's	189,951	3.102%	8.379%	5.023%	7.232%	189,754	0.104%	3.102%	0.000%	-0.012%
	1104	District Heights	Prince George's	128,858	2.104%	4.203%	3.208%	3.928%	128,789	0.053%	2.105%	0.001%	0.039%
	1101	Hyattsville	Prince George's	121,756	1.988%	29.707%	32.000%	7.727%	121,301	0.373%	1.983%	-0.006%	-0.281%
	1103	Hyattsville	Prince George's	92,644	1.513%	16.232%	21.934%	2.773%	92,450	0.209%	1.511%	-0.002%	-0.117%
		Rest of State		5,590,421	91.293%	6.633%	6.946%	3.525%	5,585,693	0.085%	91.300%	0.007%	0.008%
Nevada	406	Las Vegas	Clark	137,745	4.369%	19.230%	39.418%	1.330%	137,380	0.265%	4.364%	-0.005%	-0.122%
		Rest of State		3,014,843	95.631%	9.483%	22.696%	3.086%	3,010,700	0.137%	95.636%	0.005%	0.006%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.477%	24.385%	7.331%	140,541	0.349%	1.552%	-0.003%	-0.208%
		Rest of State		8,926,906	98.445%	10.157%	16.701%	5.109%	8,914,600	0.138%	98.448%	0.003%	0.003%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.280%	0.519%	2.587%	99,815	0.006%	11.279%	0.003%	0.028%
		Rest of State		785,429	88.724%	2.911%	2.965%	1.995%	785,136	0.037%	88.721%	-0.003%	-0.004%
Texas	2311	Dallas	Dallas	102,864	0.347%	25.300%	18.353%	9.682%	102,548	0.308%	0.347%	-0.001%	-0.144%
	3304	El Paso	El Paso	88,948	0.300%	16.418%	75.429%	0.206%	88,694	0.285%	0.300%	0.000%	-0.121%
	4612	Houston	Harris	125,161	0.423%	20.011%	22.652%	4.706%	124,845	0.253%	0.422%	0.000%	-0.089%
	4613	Houston	Harris	117,589	0.397%	27.787%	35.128%	2.843%	117,174	0.353%	0.396%	-0.001%	-0.190%
	6804	Edinburg	Hidalgo	118,076	0.399%	15.046%	75.269%	4.618%	117,753	0.274%	0.398%	0.000%	-0.110%
	6805	McAllen	Hidalgo	139,987	0.473%	20.152%	65.636%	3.602%	139,547	0.314%	0.472%	-0.001%	-0.151%
	6803	Pharr	Hidalgo	137,347	0.464%	12.078%	88.351%	1.414%	136,994	0.257%	0.464%	0.000%	-0.094%
	6301	Laredo	Webb	138,775	0.469%	23.516%	73.635%	0.244%	138,276	0.359%	0.468%	-0.001%	-0.196%
		Rest of State		28,634,150	96.728%	10.336%	31.806%	2.526%	28,588,588	0.159%	96.732%	0.005%	0.005%
Washington	11611	SeaTac	King	138,865	1.794%	17.994%	7.004%	13.603%	138,565	0.216%	1.792%	-0.002%	-0.112%
	11604	Seattle	King	182,041	2.352%	4.639%	5.670%	7.644%	181,923	0.065%	2.353%	0.001%	0.040%
	11606	Shoreline	King	121,024	1.564%	30.216%	9.454%	4.973%	120,607	0.345%	1.560%	-0.004%	-0.241%
		Rest of State		7,298,592	94.291%	7.493%	10.476%	3.849%	7,291,356	0.099%	94.296%	0.005%	0.005%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA - Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.



Table 3E: Select PUMAs' projections with 0.08% Undercount  
 5.8% Undercount for non-Citizens or Citizens living with non-Citizens (Mitigated with 98.58% NRFU)

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Non-Citizen or Living with Non-Citizen	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	52.064%	156,628	0.043%	2.149%	-0.001%	-0.030%
	900	Nogales	Santa Cruz	167,276	2.295%	19.123%	167,250	0.016%	2.295%	0.000%	-0.003%
	700	Somerton	Yuma	212,028	2.909%	34.411%	211,968	0.028%	2.909%	0.000%	-0.015%
		Rest of State		6,752,641	92.646%	14.466%	6,751,837	0.012%	92.647%	0.001%	0.001%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	30.742%	213,775	0.025%	0.532%	0.000%	-0.003%
	3744	Los Angeles	Los Angeles	200,382	0.498%	45.544%	200,307	0.038%	0.498%	0.000%	-0.015%
		Rest of State		39,808,392	98.970%	26.932%	39,799,564	0.022%	98.970%	0.000%	0.000%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	56.627%	104,824	0.047%	0.476%	0.000%	-0.032%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	32.647%	146,312	0.027%	0.664%	0.000%	-0.012%
		Rest of State		21,786,306	98.860%	17.183%	21,783,222	0.014%	98.860%	0.000%	0.000%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	17.306%	189,924	0.014%	3.102%	0.000%	-0.003%
	1104	District Heights	Prince Georges	128,858	2.104%	8.418%	128,849	0.007%	2.104%	0.000%	0.005%
	1101	Hyattsville	Prince Georges	121,756	1.988%	60.005%	121,695	0.049%	1.988%	-0.001%	-0.038%
	1103	Hyattsville	Prince Georges	92,644	1.513%	33.749%	92,618	0.028%	1.513%	0.000%	-0.016%
		Rest of State		5,590,421	91.293%	12.690%	5,589,836	0.010%	91.294%	0.001%	0.001%
Nevada	406	Las Vegas	Clark	137,745	4.369%	41.349%	137,699	0.034%	4.369%	-0.001%	-0.017%
		Rest of State		3,014,843	95.631%	19.510%	3,014,358	0.016%	95.631%	0.001%	0.001%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	40.401%	140,986	0.033%	1.555%	0.000%	-0.017%
		Rest of State		8,926,906	98.445%	19.816%	8,925,449	0.016%	98.445%	0.000%	0.000%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	1.156%	99,820	0.001%	11.276%	0.000%	0.003%
		Rest of State		785,429	88.724%	4.621%	785,399	0.004%	88.724%	0.000%	0.000%
Texas	2311	Dallas	Dallas	102,864	0.347%	43.544%	102,827	0.036%	0.347%	0.000%	-0.018%
	3304	El Paso	El Paso	88,948	0.300%	30.112%	88,926	0.025%	0.300%	0.000%	-0.007%
	4612	Houston	Harris	117,589	0.397%	52.947%	117,538	0.044%	0.397%	0.000%	-0.025%
	4613	Houston	Harris	125,161	0.423%	28.304%	125,132	0.023%	0.423%	0.000%	-0.005%
	6804	Edinburg	Hidalgo	118,076	0.399%	43.501%	118,034	0.036%	0.399%	0.000%	-0.018%
	6805	McAllen	Hidalgo	139,987	0.473%	39.972%	139,941	0.033%	0.473%	0.000%	-0.015%
	6803	Pharr	Hidalgo	137,347	0.464%	30.376%	137,313	0.025%	0.464%	0.000%	-0.007%
	6301	Laredo	Webb	138,775	0.469%	65.865%	138,700	0.054%	0.469%	0.000%	-0.036%
		Rest of State		28,634,150	96.723%	21.324%	28,629,122	0.018%	96.728%	0.001%	0.001%
Washington	11611	SeaTac	King	138,865	1.794%	33.137%	138,827	0.027%	1.794%	0.000%	-0.015%
	11604	Seattle	King	182,041	2.352%	10.532%	182,025	0.009%	2.352%	0.000%	0.004%
	11606	Shoreline	King	121,024	1.564%	39.528%	120,984	0.033%	1.563%	0.000%	-0.020%
		Rest of State		7,298,592	94.291%	14.781%	7,297,703	0.012%	94.291%	0.000%	0.001%

Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA - Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.

Table 3F: Select PUMAs' projections with 0.5% Undercount for Non-Citizens

State	PUMA	City of Plaintiff's Address	Corresponding County Name in Brace Table 3	Actual PUMA Population Projection 2020	Statewide Share of Actual Population	Percent Non-Citizen	Census Count with Citizenship Question	Census Undercount Percent	Statewide Share of Counted Population	Absolute Change in Share of Statewide Population	Percentage Change in Share of Statewide Population
Arizona	121	Phoenix	Maricopa	156,695	2.150%	22.579%	156,518	0.113%	2.148%	-0.002%	-0.078%
	900	Nogales	Santa Cruz	167,276	2.295%	5.686%	167,229	0.028%	2.295%	0.000%	0.007%
	700	Somerton	Yuma	212,028	2.909%	15.638%	211,862	0.078%	2.908%	-0.001%	-0.043%
		Rest of State		6,752,641	92.646%	6.455%	6,750,462	0.032%	92.649%	0.003%	0.003%
California	3735	Los Angeles	Los Angeles	213,829	0.532%	13.355%	213,686	0.067%	0.532%	0.000%	-0.006%
	3744	Los Angeles	Los Angeles	200,382	0.498%	21.342%	200,169	0.107%	0.498%	0.000%	-0.045%
		Rest of State		39,808,392	98.970%	12.202%	39,784,104	0.061%	98.970%	0.000%	0.000%
Florida	8619	Miami	Miami-Dade	104,872	0.476%	29.677%	104,717	0.148%	0.475%	0.000%	-0.102%
	9904	West Palm Beach	Palm Beach	146,351	0.664%	22.780%	146,184	0.114%	0.664%	0.000%	-0.067%
		Rest of State		21,786,306	98.860%	9.113%	21,776,378	0.046%	98.861%	0.001%	0.001%
Maryland	1105	Bowie	Prince Georges	189,951	3.102%	8.379%	189,872	0.042%	3.102%	0.000%	-0.006%
	1104	District Heights	Prince Georges	128,858	2.104%	4.203%	128,831	0.021%	2.105%	0.000%	0.015%
	1101	Hyattsville	Prince Georges	121,756	1.988%	29.707%	121,575	0.149%	1.986%	-0.002%	-0.112%
	1103	Hyattsville	Prince Georges	92,644	1.513%	16.232%	92,569	0.081%	1.512%	-0.001%	-0.045%
		Rest of State		5,590,421	91.293%	6.633%	5,588,567	0.033%	91.295%	0.003%	0.003%
Nevada	406	Las Vegas	Clark	137,745	4.369%	19.230%	137,613	0.096%	4.367%	-0.002%	-0.047%
		Rest of State		3,014,843	95.631%	9.483%	3,013,413	0.047%	95.633%	0.002%	0.002%
New Jersey	601	Jersey City	Hudson	141,033	1.555%	28.477%	140,832	0.142%	1.554%	-0.001%	-0.090%
		Rest of State		8,926,906	98.445%	10.157%	8,922,373	0.051%	98.446%	0.001%	0.001%
South Dakota	200	No Plaintiff Address	Todd	99,821	11.276%	0.280%	99,820	0.001%	11.277%	0.001%	0.012%
		Rest of State		785,429	88.724%	2.911%	785,315	0.015%	88.723%	-0.001%	-0.001%
Texas	2311	Dallas	Dallas	102,864	0.347%	25.300%	102,734	0.127%	0.347%	0.000%	-0.073%
	3304	El Paso	El Paso	88,948	0.300%	16.418%	88,875	0.082%	0.300%	0.000%	-0.029%
	4612	Houston	Harris	117,589	0.397%	27.787%	117,425	0.139%	0.397%	0.000%	-0.086%
	4613	Houston	Harris	125,161	0.423%	20.011%	125,036	0.100%	0.423%	0.000%	-0.047%
	6804	Edinburg	Hidalgo	118,076	0.399%	15.046%	117,988	0.075%	0.399%	0.000%	-0.022%
	6805	McAllen	Hidalgo	139,987	0.473%	20.152%	139,846	0.101%	0.473%	0.000%	-0.048%
	6803	Pharr	Hidalgo	137,347	0.464%	12.078%	137,264	0.060%	0.464%	0.000%	-0.007%
	6301	Laredo	Webb	138,775	0.469%	23.516%	138,612	0.118%	0.468%	0.000%	-0.064%
Washington		Rest of State		28,634,150	96.723%	10.336%	28,619,352	0.052%	96.729%	0.002%	0.002%
	11611	SeaTac	King	138,865	1.794%	17.994%	138,740	0.090%	1.793%	-0.001%	-0.050%
	11604	Seattle	King	182,041	2.352%	4.639%	181,998	0.023%	2.352%	0.000%	0.017%
	11606	Shoreline	King	121,024	1.564%	30.216%	120,841	0.151%	1.562%	-0.002%	-0.111%
		Rest of State		7,298,592	94.291%	7.493%	7,295,857	0.037%	94.293%	0.002%	0.002%

## Note:

Estimates are based on 1-year ACS PUMS microdata samples, from 2014 to 2017.

The level of observation is a PUMA - Additional Geographies (City, State, and Corresponding County Name) are Included for Reference Only.



Table 2A.1: Reapportionment Projections for 2020 2% Undercount Due to Citizenship Question

State	Actual State Population Projection 2020	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Percent Non-Hispanic, Citizen, Living With Non-Citizens	Census Count with Citizenship Question	Census Statewide Undercount	Congressional Seats	Change in Congressional Seats from Baseline
Alabama	4,906,793	4.350%	1.063%	0.844%	4,900,652	-6,141	6	0
Alaska	742,589	7.367%	2.950%	4.806%	740,343	-2,246	1	0
Arizona	7,313,407	32.202%	2.547%	1.776%	7,259,982	-53,425	10	0
Arkansas	3,040,950	7.953%	1.390%	1.034%	3,034,639	-6,311	4	0
California	40,318,943	39.619%	5.051%	4.720%	39,920,672	-398,271	52	-1
Colorado	5,861,962	21.801%	2.408%	2.355%	5,830,820	-31,143	8	0
Connecticut	3,577,217	17.234%	3.838%	3.997%	3,559,281	-17,936	5	0
Delaware	987,534	9.830%	2.633%	2.421%	984,594	-2,940	1	0
Florida	22,034,897	27.058%	3.715%	3.713%	21,882,918	-151,979	29	0
Georgia	10,756,967	10.043%	3.100%	2.639%	10,723,014	-33,953	14	0
Hawaii	1,436,609	11.039%	6.729%	8.141%	1,429,166	-7,444	2	0
Idaho	1,800,494	12.834%	0.891%	1.494%	1,795,014	-5,481	2	0
Illinois	12,728,769	17.733%	3.487%	2.585%	12,668,167	-60,602	17	0
Indiana	6,735,072	7.371%	2.049%	1.693%	6,720,102	-14,970	9	0
Iowa	3,182,989	6.352%	2.052%	1.642%	3,176,594	-6,395	4	0
Kansas	2,925,620	12.457%	1.683%	1.384%	2,916,537	-9,084	4	0
Kentucky	4,484,713	3.715%	1.439%	1.281%	4,488,930	-5,784	6	0
Louisiana	4,717,157	5.617%	1.030%	0.877%	4,710,058	-7,099	6	0
Maine	1,342,361	2.096%	1.144%	2.601%	1,340,793	-1,568	2	0
Maryland	6,128,312	10.966%	3.746%	3.675%	6,105,776	-22,536	8	0
Massachusetts	6,954,630	12.835%	6.690%	4.539%	6,921,160	-33,470	9	0
Michigan	10,006,187	5.278%	2.937%	2.086%	9,985,574	-20,613	13	0
Minnesota	5,692,816	5.554%	2.891%	3.128%	5,679,640	-13,176	7	0
Mississippi	2,980,001	3.083%	0.573%	0.366%	2,977,604	-2,397	4	0
Missouri	6,164,890	4.535%	1.443%	0.916%	6,156,390	-8,500	8	0
Montana	1,079,348	4.251%	0.646%	1.211%	1,078,029	-1,319	2	1
Nebraska	1,956,716	11.748%	2.724%	2.717%	1,949,989	-6,727	3	0
Nevada	3,159,442	29.850%	3.438%	2.984%	3,136,523	-22,920	4	0
New Hampshire	1,355,867	4.376%	3.029%	1.670%	1,353,407	-2,461	2	0
New Jersey	9,063,461	21.487%	5.765%	5.141%	9,004,741	-58,720	12	0
New Mexico	2,092,538	49.773%	1.053%	0.827%	2,070,921	-21,617	3	0
New York	19,919,166	19.781%	5.740%	5.756%	19,794,564	-124,602	26	0
North Carolina	10,588,169	9.752%	2.383%	1.752%	10,558,761	-29,408	14	0
North Dakota	771,081	5.090%	1.908%	1.179%	769,820	-1,261	1	0
Ohio	11,718,404	4.044%	1.732%	1.382%	11,701,626	-16,778	15	0
Oklahoma	3,982,803	11.530%	1.401%	1.104%	3,971,623	-11,180	5	0
Oregon	4,317,379	13.549%	2.728%	2.840%	4,300,872	-16,507	6	0
Pennsylvania	12,819,483	8.124%	2.430%	1.632%	12,788,240	-31,243	17	0
Rhode Island	1,064,112	16.710%	2.998%	2.372%	1,059,413	-4,699	1	0
South Carolina	5,214,916	6.036%	1.264%	1.029%	5,206,228	-8,688	7	0
South Dakota	888,634	3.671%	1.240%	1.832%	887,435	-1,198	1	0
Tennessee	6,881,637	5.845%	1.627%	1.404%	6,869,421	-12,216	9	0
Texas	29,604,237	40.209%	3.062%	2.537%	29,333,016	-271,221	39	0
Utah	3,259,702	14.591%	1.947%	2.286%	3,247,431	-12,271	4	0
Vermont	621,822	2.412%	2.744%	1.303%	621,019	-803	1	0
Virginia	8,612,962	9.872%	3.232%	3.869%	8,583,723	-29,239	11	0
Washington	7,751,401	13.183%	4.880%	4.101%	7,717,042	-34,360	10	0
Washington DC	725,909	11.758%	6.064%	5.690%	722,496	-3,414	0	0
West Virginia	1,787,238	1.275%	0.901%	1.434%	1,785,948	-1,290	2	0
Wisconsin	5,836,321	7.149%	1.727%	1.393%	5,824,335	-11,986	8	0
Wyoming	575,656	10.151%	0.695%	1.706%	574,211	-1,445	1	0
United States	332,480,287	18.780%	3.271%	2.929%	330,819,251	-1,661,037	435	1

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.

The "Change in Congressional Seats from Baseline" for the United States as a whole is the net number of seats that move from one state to another, avoiding double counting. It is equal to the total number of seats lost by all states that lose seats; equivalently, it is equal to the total number of seats gained by all states that gain seats.

Table 2B.1: Reapportionment Projections for 2020 5.8% Undercount Due to Citizenship Question

State	Actual State Population Projection 2020	Percent Hispanic	Percent Non- Hispanic, Non- Citizen	Percent Non- Hispanic, Citizen, Living With Non- Citizens	Census Count with Citizenship Question	Census Statewide Undercount	Congressional Seats	Change in Congressional Seats from Baseline
Alabama	4,906,793	4.350%	1.063%	0.844%	4,888,985	-17,808	6	0
Alaska	742,589	7.367%	2.950%	4.806%	736,076	-6,514	1	0
Arizona	7,313,407	32.202%	2.547%	1.776%	7,158,475	-154,932	10	0
Arkansas	3,040,950	7.953%	1.390%	1.034%	3,022,648	-18,302	4	0
California	40,318,943	39.619%	5.051%	4.720%	39,163,956	-1,154,987	52	-1
Colorado	5,861,962	21.801%	2.408%	2.355%	5,771,649	-90,313	8	0
Connecticut	3,577,217	17.234%	3.838%	3.997%	3,525,204	-52,014	5	0
Delaware	987,534	9.830%	2.633%	2.421%	979,009	-8,525	1	0
Florida	22,034,897	27.058%	3.715%	3.713%	21,594,160	-440,737	29	0
Georgia	10,756,967	10.043%	3.100%	2.639%	10,658,504	-98,463	14	0
Hawaii	1,436,609	11.039%	6.729%	8.141%	1,415,022	-21,587	2	0
Idaho	1,800,494	12.834%	0.891%	1.494%	1,784,600	-15,894	2	0
Illinois	12,728,769	17.733%	3.487%	2.585%	12,553,022	-175,747	17	0
Indiana	6,735,072	7.371%	2.049%	1.693%	6,691,660	-43,412	9	0
Iowa	3,182,989	6.352%	2.052%	1.642%	3,164,443	-18,547	4	0
Kansas	2,925,620	12.457%	1.683%	1.384%	2,899,278	-26,343	4	0
Kentucky	4,494,713	3.715%	1.439%	1.281%	4,477,940	-16,773	6	0
Louisiana	4,717,157	5.617%	1.030%	0.877%	4,696,569	-20,588	6	0
Maine	1,342,361	2.096%	1.144%	2.601%	1,337,814	-4,547	2	0
Maryland	6,128,312	10.966%	3.746%	3.675%	6,062,958	-65,354	8	0
Massachusetts	6,954,630	12.835%	6.690%	4.539%	6,857,568	-97,063	9	0
Michigan	10,006,187	5.278%	2.937%	2.086%	9,946,408	-59,779	13	0
Minnesota	5,692,816	5.554%	2.891%	3.128%	5,654,605	-38,211	8	1
Mississippi	2,980,001	3.083%	0.573%	0.366%	2,973,050	-6,952	4	0
Missouri	6,164,890	4.535%	1.443%	0.916%	6,140,240	-24,650	8	0
Montana	1,079,348	4.251%	0.646%	1.211%	1,075,524	-3,824	2	1
Nebraska	1,956,716	11.748%	2.724%	2.717%	1,937,208	-19,508	3	0
Nevada	3,159,442	29.850%	3.438%	2.984%	3,092,975	-66,468	4	0
New Hampshire	1,355,867	4.376%	3.029%	1.670%	1,348,731	-7,137	2	0
New Jersey	9,063,461	21.487%	5.765%	5.141%	8,893,174	-170,287	12	0
New Mexico	2,092,538	49.773%	1.053%	0.827%	2,029,849	-62,689	3	0
New York	19,919,166	19.781%	5.740%	5.756%	19,557,818	-361,348	26	0
North Carolina	10,588,169	9.752%	2.383%	1.752%	10,502,886	-85,283	14	0
North Dakota	771,081	5.090%	1.908%	1.179%	767,424	-3,657	1	0
Ohio	11,718,404	4.044%	1.732%	1.382%	11,669,747	-48,657	15	0
Oklahoma	3,982,803	11.530%	1.401%	1.104%	3,950,381	-32,422	5	0
Oregon	4,317,379	13.549%	2.728%	2.840%	4,269,510	-47,869	6	0
Pennsylvania	12,819,483	8.124%	2.430%	1.632%	12,728,877	-90,606	17	0
Rhode Island	1,064,112	16.710%	2.998%	2.372%	1,050,484	-13,627	1	0
South Carolina	5,214,916	6.036%	1.264%	1.029%	5,189,722	-25,194	7	0
South Dakota	888,634	3.671%	1.240%	1.832%	885,159	-3,475	1	0
Tennessee	6,881,637	5.845%	1.627%	1.404%	6,846,210	-35,427	9	0
Texas	29,604,237	40.209%	3.062%	2.537%	28,817,694	-786,543	38	-1
Utah	3,259,702	14.591%	1.947%	2.286%	3,224,115	-35,587	4	0
Vermont	621,822	2.412%	2.744%	1.303%	619,493	-2,330	1	0
Virginia	8,612,962	9.872%	3.232%	3.869%	8,528,170	-84,792	11	0
Washington	7,751,401	13.183%	4.880%	4.101%	7,651,758	-99,643	10	0
Washington DC	725,909	11.758%	6.064%	5.690%	716,010	-9,899	0	0
West Virginia	1,787,238	1.275%	0.901%	1.434%	1,783,496	-3,742	2	0
Wisconsin	5,836,321	7.149%	1.727%	1.393%	5,801,561	-34,761	8	0
Wyoming	575,656	10.151%	0.695%	1.706%	571,465	-4,191	1	0
United States	332,480,287	18.780%	3.271%	2.929%	327,663,280	-4,817,007	435	2

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.

The "Change in Congressional Seats from Baseline" for the United States as a whole is the net number of seats that move from one state to another, avoiding double counting. It is equal to the total number of seats lost by all states that lose seats; equivalently, it is equal to the total number of seats gained by all states that gain seats.



Table 2C.1: Reapportionment Projections for 2020 8.09% Undercount Due to Citizenship Question

State	Actual State Population Projection 2020	Percent Hispanic	Percent Non- Hispanic, Non- Citizen	Percent Non- Hispanic, Citizen, Living With Non- Citizens	Census Count with Citizenship Question	Census Statewide Undercount	Congressional Seats	Change in Congressional Seats from Baseline
Alabama	4,906,793	4.350%	1.063%	0.844%	4,881,954	-24,839	7	1
Alaska	742,589	7.367%	2.950%	4.806%	733,504	-9,085	1	0
Arizona	7,313,407	32.202%	2.547%	1.776%	7,097,304	-216,103	9	-1
Arkansas	3,040,950	7.953%	1.390%	1.034%	3,015,422	-25,528	4	0
California	40,318,943	39.619%	5.051%	4.720%	38,707,936	-1,611,007	51	-2
Colorado	5,861,962	21.801%	2.408%	2.355%	5,735,991	-125,971	8	0
Connecticut	3,577,217	17.234%	3.838%	3.997%	3,504,667	-72,550	5	0
Delaware	987,534	9.830%	2.633%	2.421%	975,643	-11,891	1	0
Florida	22,034,897	27.058%	3.715%	3.713%	21,420,144	-614,753	29	0
Georgia	10,756,967	10.043%	3.100%	2.639%	10,619,629	-137,338	14	0
Hawaii	1,436,609	11.039%	6.729%	8.141%	1,406,499	-30,110	2	0
Idaho	1,800,494	12.834%	0.891%	1.494%	1,778,325	-22,169	2	0
Illinois	12,728,769	17.733%	3.487%	2.585%	12,483,632	-245,137	17	0
Indiana	6,735,072	7.371%	2.049%	1.693%	6,674,520	-60,552	9	0
Iowa	3,182,989	6.352%	2.052%	1.642%	3,157,120	-25,869	4	0
Kansas	2,925,620	12.457%	1.683%	1.384%	2,888,877	-36,744	4	0
Kentucky	4,494,713	3.715%	1.439%	1.281%	4,471,317	-23,396	6	0
Louisiana	4,717,157	5.617%	1.030%	0.877%	4,688,441	-28,716	6	0
Maine	1,342,361	2.096%	1.144%	2.601%	1,336,019	-6,343	2	0
Maryland	6,128,312	10.966%	3.746%	3.675%	6,037,155	-91,158	8	0
Massachusetts	6,954,630	12.835%	6.690%	4.539%	6,819,244	-135,386	9	0
Michigan	10,006,187	5.278%	2.937%	2.086%	9,922,805	-83,382	13	0
Minnesota	5,692,816	5.554%	2.891%	3.128%	5,639,518	-53,298	8	1
Mississippi	2,980,001	3.083%	0.573%	0.366%	2,970,305	-9,696	4	0
Missouri	6,164,890	4.535%	1.443%	0.916%	6,130,507	-34,383	8	0
Montana	1,079,348	4.251%	0.646%	1.211%	1,074,014	-5,333	2	1
Nebraska	1,956,716	11.748%	2.724%	2.717%	1,929,506	-27,210	3	0
Nevada	3,159,442	29.850%	3.438%	2.984%	3,066,731	-92,711	4	0
New Hampshire	1,355,867	4.376%	3.029%	1.670%	1,345,913	-9,954	2	0
New Jersey	9,063,461	21.487%	5.765%	5.141%	8,825,941	-237,520	12	0
New Mexico	2,092,538	49.773%	1.053%	0.827%	2,005,098	-87,440	3	0
New York	19,919,166	19.781%	5.740%	5.756%	19,415,148	-504,018	26	0
North Carolina	10,588,169	9.752%	2.383%	1.752%	10,469,214	-118,955	14	0
North Dakota	771,081	5.090%	1.908%	1.179%	765,980	-5,101	1	0
Ohio	11,718,404	4.044%	1.732%	1.382%	11,650,535	-67,869	16	1
Oklahoma	3,982,803	11.530%	1.401%	1.104%	3,937,580	-45,223	5	0
Oregon	4,317,379	13.549%	2.728%	2.840%	4,250,610	-66,769	6	0
Pennsylvania	12,819,483	8.124%	2.430%	1.632%	12,693,104	-126,379	17	0
Rhode Island	1,064,112	16.710%	2.998%	2.372%	1,045,104	-19,008	1	0
South Carolina	5,214,916	6.036%	1.264%	1.029%	5,179,774	-35,142	7	0
South Dakota	888,634	3.671%	1.240%	1.832%	883,787	-4,847	1	0
Tennessee	6,881,637	5.845%	1.627%	1.404%	6,832,223	-49,414	9	0
Texas	29,604,237	40.209%	3.062%	2.537%	28,507,144	-1,097,093	38	-1
Utah	3,259,702	14.591%	1.947%	2.286%	3,210,064	-49,638	4	0
Vermont	621,822	2.412%	2.744%	1.303%	618,573	-3,250	1	0
Virginia	8,612,962	9.872%	3.232%	3.869%	8,494,691	-118,271	11	0
Washington	7,751,401	13.183%	4.880%	4.101%	7,612,416	-138,985	10	0
Washington DC	725,909	11.758%	6.064%	5.690%	712,101	-13,808	0	0
West Virginia	1,787,238	1.275%	0.901%	1.434%	1,782,018	-5,220	2	0
Wisconsin	5,836,321	7.149%	1.727%	1.393%	5,787,836	-48,485	8	0
Wyoming	575,656	10.151%	0.695%	1.706%	569,810	-5,846	1	0
United States	332,480,287	18.780%	3.271%	2.929%	325,761,392	-6,718,895	435	4

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.

The "Change in Congressional Seats from Baseline" for the United States as a whole is the net number of seats that move from one state to another, avoiding double counting. It is equal to the total number of seats lost by all states that lose seats; or, equivalently, it is equal to the total number of seats gained by all states that gain seats.

Table 4A.1: Statewide Population Projections for July 2020 with Undercount Rates Due to Citizenship Question  
Version 1: 1.08% Undercount for Non-Citizens, 10% Undercount for Hispanics (Mitigated with 98.58% NRFU)

State	Projected Population July 2020	Percent Non- Citizen	Percent Hispanic Citizen	Statewide Undercount	Population Estimate (As of July 2020) with Undercount	Statewide Undercount Percentage
		1.08% Undercount	0.14% Undercount			
Alabama	4,909,706	2.402%	3.038%	-1,488	4,908,218	0.030%
Alaska	742,844	3.433%	6.917%	-349	742,495	0.047%
Arizona	7,340,419	6.962%	27.996%	-8,450	7,331,970	0.115%
Arkansas	3,044,284	2.985%	6.562%	-1,267	3,043,017	0.042%
California	40,390,060	12.192%	32.650%	-72,024	40,318,036	0.178%
Colorado	5,885,126	5.398%	18.874%	-5,015	5,880,111	0.085%
Connecticut	3,576,220	6.977%	14.124%	-3,418	3,572,802	0.096%
Delaware	989,861	5.422%	7.074%	-680	989,180	0.069%
Florida	22,130,397	9.302%	21.659%	-29,087	22,101,310	0.131%
Georgia	10,786,748	5.783%	7.455%	-7,894	10,778,854	0.073%
Hawaii	1,437,434	7.222%	10.578%	-1,340	1,436,095	0.093%
Idaho	1,808,090	2.516%	11.439%	-786	1,807,304	0.043%
Illinois	12,722,110	7.330%	13.951%	-12,614	12,709,496	0.099%
Indiana	6,741,276	3.596%	5.878%	-3,187	6,738,090	0.047%
Iowa	3,186,378	3.006%	5.492%	-1,285	3,185,093	0.040%
Kansas	2,926,757	3.785%	10.502%	-1,636	2,925,121	0.056%
Kentucky	4,498,397	2.372%	2.823%	-1,335	4,497,062	0.030%
Louisiana	4,720,141	2.446%	4.253%	-1,535	4,718,606	0.033%
Maine	1,342,948	1.298%	1.943%	-226	1,342,722	0.017%
Maryland	6,135,233	7.187%	7.584%	-5,433	6,129,801	0.089%
Massachusetts	6,963,249	8.705%	10.981%	-7,646	6,955,603	0.110%
Michigan	10,010,176	3.831%	4.431%	-4,780	10,005,396	0.048%
Minnesota	5,703,381	3.987%	4.526%	-2,828	5,700,553	0.050%
Mississippi	2,979,629	1.036%	2.731%	-450	2,979,179	0.015%
Missouri	6,169,559	2.204%	3.818%	-1,806	6,167,753	0.029%
Montana	1,081,971	1.165%	3.713%	-193	1,081,777	0.018%
Nebraska	1,960,047	5.128%	9.350%	-1,348	1,958,699	0.069%
Nevada	3,174,115	9.891%	23.567%	-4,460	3,169,655	0.141%
New Hampshire	1,357,056	3.349%	4.189%	-573	1,356,483	0.042%
New Jersey	9,068,717	10.469%	16.922%	-12,455	9,056,262	0.137%
New Mexico	2,092,944	4.342%	46.905%	-2,378	2,090,567	0.114%
New York	19,925,509	9.669%	15.921%	-25,357	19,900,152	0.127%
North Carolina	10,616,783	4.871%	7.367%	-6,709	10,610,074	0.063%
North Dakota	772,507	2.634%	4.494%	-270	772,238	0.035%
Ohio	11,723,840	2.212%	3.606%	-3,407	11,720,433	0.029%
Oklahoma	3,987,525	3.611%	9.495%	-2,096	3,985,429	0.053%
Oregon	4,333,252	4.865%	11.617%	-2,997	4,330,255	0.069%
Pennsylvania	12,820,751	3.458%	7.193%	-6,108	12,814,643	0.048%
Rhode Island	1,064,518	5.664%	14.304%	-869	1,063,650	0.082%
South Carolina	5,232,238	2.604%	4.799%	-1,831	5,230,408	0.035%
South Dakota	890,358	2.681%	2.454%	-289	890,069	0.033%
Tennessee	6,896,696	3.099%	4.491%	-2,753	6,893,943	0.040%
Texas	29,722,386	10.626%	32.746%	-48,004	29,674,382	0.162%
Utah	3,274,054	5.423%	11.178%	-2,441	3,271,613	0.075%
Vermont	621,655	2.868%	2.384%	-214	621,441	0.034%
Virginia	8,625,957	5.626%	7.615%	-6,186	8,619,771	0.072%
Washington	7,782,825	7.840%	10.299%	-7,742	7,775,083	0.099%
Washington DC	728,813	9.663%	8.311%	-848	727,964	0.116%
West Virginia	1,784,636	0.763%	1.419%	-183	1,784,453	0.010%
Wisconsin	5,840,034	2.651%	6.282%	-2,197	5,837,837	0.038%
Wyoming	575,324	1.912%	9.015%	-193	575,131	0.033%
United States	333,094,933	6.825%	15.345%	-318,659	332,776,274	0.096%

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4B.1: Statewide Population Projections for July 2021 with Undercount Rates Due to Citizenship Question  
Version 1: 1.08% Undercount for Non-Citizens, 10% Undercount for Hispanics (Mitigated with 98.58% NRFU)

State	Projected Population July 2021	Percent Non- Citizen	Percent Hispanic Citizen	Statewide Undercount	Population Estimate (As of July 2021) with Undercount	Statewide Undercount Percentage
		1.08% Undercount	0.14% Undercount			
Alabama	4,921,359	2.457%	3.086%	-1,524	4,919,835	0.031%
Alaska	743,860	3.452%	7.032%	-352	743,507	0.047%
Arizona	7,448,469	6.767%	28.579%	-8,478	7,439,991	0.114%
Arkansas	3,057,619	2.914%	6.978%	-1,267	3,056,352	0.041%
California	40,674,529	11.948%	33.200%	-71,777	40,602,752	0.176%
Colorado	5,977,784	5.322%	19.143%	-5,068	5,972,716	0.085%
Connecticut	3,572,232	6.947%	14.445%	-3,419	3,568,814	0.096%
Delaware	999,168	5.596%	7.019%	-705	998,463	0.071%
Florida	22,512,396	9.304%	22.272%	-29,790	22,482,606	0.132%
Georgia	10,905,871	5.791%	7.724%	-8,032	10,897,839	0.074%
Hawaii	1,440,733	7.227%	10.732%	-1,346	1,439,386	0.093%
Idaho	1,838,472	2.328%	11.815%	-772	1,837,700	0.042%
Illinois	12,695,472	7.434%	14.148%	-12,766	12,682,706	0.101%
Indiana	6,766,096	3.710%	6.056%	-3,299	6,762,797	0.049%
Iowa	3,199,934	2.986%	5.737%	-1,295	3,198,639	0.040%
Kansas	2,931,301	3.708%	10.880%	-1,629	2,929,672	0.056%
Kentucky	4,513,134	2.377%	2.936%	-1,349	4,511,785	0.030%
Louisiana	4,732,077	2.462%	4.413%	-1,558	4,730,519	0.033%
Maine	1,345,295	1.227%	2.126%	-219	1,345,076	0.016%
Maryland	6,162,919	7.133%	7.879%	-5,447	6,157,472	0.088%
Massachusetts	6,997,726	8.927%	11.401%	-7,895	6,989,832	0.113%
Michigan	10,026,131	3.959%	4.502%	-4,937	10,021,194	0.049%
Minnesota	5,745,639	3.988%	4.705%	-2,864	5,742,775	0.050%
Mississippi	2,978,138	0.994%	2.920%	-444	2,977,694	0.015%
Missouri	6,188,234	2.254%	3.941%	-1,856	6,186,379	0.030%
Montana	1,092,463	1.162%	3.835%	-197	1,092,267	0.018%
Nebraska	1,973,371	5.330%	9.725%	-1,411	1,971,960	0.071%
Nevada	3,232,808	9.819%	24.124%	-4,543	3,228,265	0.141%
New Hampshire	1,361,809	3.479%	4.523%	-600	1,361,209	0.044%
New Jersey	9,089,741	10.578%	17.335%	-12,645	9,077,096	0.139%
New Mexico	2,094,569	4.058%	47.760%	-2,340	2,092,229	0.112%
New York	19,950,879	9.572%	16.202%	-25,261	19,925,618	0.127%
North Carolina	10,731,238	4.851%	7.685%	-6,806	10,724,432	0.063%
North Dakota	778,212	2.674%	5.150%	-282	777,930	0.036%
Ohio	11,745,584	2.232%	3.735%	-3,461	11,742,123	0.029%
Oklahoma	4,006,412	3.570%	9.952%	-2,114	4,004,298	0.053%
Oregon	4,396,744	4.735%	12.080%	-3,008	4,393,736	0.068%
Pennsylvania	12,825,822	3.533%	7.499%	-6,270	12,819,552	0.049%
Rhode Island	1,066,145	5.571%	14.988%	-870	1,065,275	0.082%
South Carolina	5,301,528	2.564%	5.033%	-1,850	5,299,678	0.035%
South Dakota	897,255	2.967%	2.366%	-318	896,937	0.035%
Tennessee	6,956,934	3.084%	4.759%	-2,793	6,954,141	0.040%
Texas	30,194,983	10.584%	33.194%	-48,823	30,146,160	0.162%
Utah	3,331,461	5.445%	11.387%	-2,502	3,328,959	0.075%
Vermont	620,988	3.063%	2.583%	-229	620,760	0.037%
Virginia	8,677,936	5.524%	7.949%	-6,168	8,671,768	0.071%
Washington	7,908,519	7.973%	10.506%	-8,005	7,900,514	0.101%
Washington DC	740,426	9.846%	8.746%	-881	739,545	0.119%
West Virginia	1,774,229	0.760%	1.508%	-184	1,774,045	0.010%
Wisconsin	5,854,884	2.664%	6.504%	-2,229	5,852,656	0.038%
Wyoming	573,993	1.809%	9.190%	-187	573,806	0.033%
United States	335,553,518	6.805%	15.719%	-322,064	335,231,454	0.096%

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4C.1: Statewide Population Projections for July 2022 with Undercount Rates Due to Citizenship Question  
Version 1: 1.08% Undercount for Non-Citizens, 10% Undercount for Hispanics (Mitigated with 98.58% NRFU)

State	Projected Population July 2022	Percent Non- Citizen	Percent Hispanic Citizen	Statewide Undercount	Population Estimate (As of July 2022) with Undercount	Statewide Undercount Percentage
		1.08% Undercount	0.14% Undercount			
Alabama	4,933,012	2.514%	3.135%	-1,562	4,931,450	0.032%
Alaska	744,876	3.472%	7.148%	-355	744,520	0.048%
Arizona	7,556,519	6.576%	29.173%	-8,509	7,548,010	0.113%
Arkansas	3,070,953	2.844%	7.420%	-1,269	3,069,685	0.041%
California	40,958,998	11.709%	33.759%	-71,546	40,887,452	0.175%
Colorado	6,070,441	5.248%	19.416%	-5,121	6,065,320	0.084%
Connecticut	3,568,244	6.917%	14.773%	-3,420	3,564,824	0.096%
Delaware	1,008,475	5.775%	6.964%	-730	1,007,745	0.072%
Florida	22,894,395	9.307%	22.902%	-30,507	22,863,888	0.133%
Georgia	11,024,994	5.799%	8.003%	-8,173	11,016,821	0.074%
Hawaii	1,444,032	7.231%	10.888%	-1,354	1,442,678	0.094%
Idaho	1,868,854	2.153%	12.203%	-759	1,868,095	0.041%
Illinois	12,668,835	7.540%	14.349%	-12,921	12,655,914	0.102%
Indiana	6,790,915	3.828%	6.239%	-3,415	6,787,500	0.050%
Iowa	3,213,489	2.967%	5.993%	-1,305	3,212,184	0.041%
Kansas	2,935,846	3.633%	11.271%	-1,624	2,934,221	0.055%
Kentucky	4,527,870	2.381%	3.053%	-1,363	4,526,507	0.030%
Louisiana	4,744,012	2.478%	4.578%	-1,581	4,742,432	0.033%
Maine	1,347,642	1.161%	2.326%	-214	1,347,428	0.016%
Maryland	6,190,604	7.079%	8.185%	-5,463	6,185,142	0.088%
Massachusetts	7,032,203	9.155%	11.837%	-8,150	7,024,053	0.116%
Michigan	10,042,086	4.091%	4.575%	-5,099	10,036,987	0.051%
Minnesota	5,787,898	3.989%	4.891%	-2,901	5,784,997	0.050%
Mississippi	2,976,648	0.954%	3.122%	-439	2,976,209	0.015%
Missouri	6,206,910	2.305%	4.068%	-1,907	6,205,003	0.031%
Montana	1,102,956	1.159%	3.962%	-200	1,102,756	0.018%
Nebraska	1,986,695	5.539%	10.115%	-1,476	1,985,218	0.074%
Nevada	3,291,500	9.747%	24.695%	-4,627	3,286,873	0.141%
New Hampshire	1,366,563	3.614%	4.883%	-629	1,365,934	0.046%
New Jersey	9,110,765	10.688%	17.759%	-12,837	9,097,928	0.141%
New Mexico	2,096,194	3.791%	48.630%	-2,308	2,093,886	0.110%
New York	19,976,249	9.477%	16.488%	-25,167	19,951,082	0.126%
North Carolina	10,845,692	4.831%	8.017%	-6,905	10,838,787	0.064%
North Dakota	783,917	2.713%	5.902%	-296	783,621	0.038%
Ohio	11,767,327	2.252%	3.868%	-3,515	11,763,812	0.030%
Oklahoma	4,025,299	3.529%	10.431%	-2,134	4,023,166	0.053%
Oregon	4,460,235	4.608%	12.560%	-3,020	4,457,216	0.068%
Pennsylvania	12,830,894	3.610%	7.817%	-6,437	12,824,457	0.050%
Rhode Island	1,067,771	5.479%	15.705%	-871	1,066,900	0.082%
South Carolina	5,370,818	2.524%	5.279%	-1,870	5,368,948	0.035%
South Dakota	904,152	3.284%	2.282%	-351	903,802	0.039%
Tennessee	7,017,171	3.070%	5.044%	-2,834	7,014,337	0.040%
Texas	30,667,580	10.543%	33.648%	-49,650	30,617,930	0.162%
Utah	3,388,868	5.467%	11.601%	-2,563	3,386,305	0.076%
Vermont	620,321	3.271%	2.798%	-244	620,077	0.039%
Virginia	8,729,915	5.423%	8.297%	-6,153	8,723,762	0.070%
Washington	8,034,213	8.109%	10.717%	-8,274	8,025,939	0.103%
Washington DC	752,040	10.032%	9.205%	-915	751,125	0.122%
West Virginia	1,763,822	0.757%	1.602%	-185	1,763,638	0.010%
Wisconsin	5,869,734	2.677%	6.734%	-2,262	5,867,473	0.039%
Wyoming	572,663	1.711%	9.369%	-182	572,481	0.032%
United States	338,012,104	6.787%	16.103%	-325,593	337,686,511	0.096%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017  
Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4A.2: Statewide Population Projections for July 2020 with Undercount Rates Due to Citizenship Question  
Version 2: 0.08% Undercount for all Non-Citizens and Households that Include Non-Citizens

State	Projected Population July 2020	Percent Non- Citizen or Living with Non-Citizen	Statewide Undercount	Population Estimate (As of July 2020) with Undercount	Statewide Undercount Percentage
Alabama	4,909,706	4.622%	-187	4,909,519	0.004%
Alaska	742,844	8.654%	-53	742,791	0.007%
Arizona	7,340,419	15.880%	-960	7,339,459	0.013%
Arkansas	3,044,284	6.109%	-153	3,044,131	0.005%
California	40,390,060	26.968%	-8,972	40,381,088	0.022%
Colorado	5,885,126	11.307%	-548	5,884,579	0.009%
Connecticut	3,576,220	13.965%	-411	3,575,809	0.012%
Delaware	989,861	10.548%	-86	989,775	0.009%
Florida	22,130,397	17.497%	-3,189	22,127,208	0.014%
Georgia	10,786,748	11.280%	-1,002	10,785,746	0.009%
Hawaii	1,437,434	16.465%	-195	1,437,239	0.014%
Idaho	1,808,090	6.220%	-93	1,807,997	0.005%
Illinois	12,722,110	14.959%	-1,567	12,720,543	0.012%
Indiana	6,741,276	7.159%	-397	6,740,879	0.006%
Iowa	3,186,378	6.222%	-163	3,186,215	0.005%
Kansas	2,926,757	7.554%	-182	2,926,575	0.006%
Kentucky	4,498,397	4.551%	-168	4,498,229	0.004%
Louisiana	4,720,141	4.365%	-170	4,719,971	0.004%
Maine	1,342,948	3.741%	-41	1,342,907	0.003%
Maryland	6,135,233	13.954%	-705	6,134,529	0.011%
Massachusetts	6,963,249	14.829%	-850	6,962,399	0.012%
Michigan	10,010,176	6.770%	-558	10,009,618	0.006%
Minnesota	5,703,381	8.691%	-408	5,702,973	0.007%
Mississippi	2,979,629	2.026%	-50	2,979,579	0.002%
Missouri	6,169,559	4.087%	-208	6,169,351	0.003%
Montana	1,081,971	2.509%	-22	1,081,948	0.002%
Nebraska	1,960,047	10.174%	-164	1,959,883	0.008%
Nevada	3,174,115	20.414%	-534	3,173,582	0.017%
New Hampshire	1,357,056	5.009%	-56	1,357,000	0.004%
New Jersey	9,068,717	20.211%	-1,510	9,067,207	0.017%
New Mexico	2,092,944	10.283%	-177	2,092,767	0.008%
New York	19,925,509	19.531%	-3,205	19,922,304	0.016%
North Carolina	10,616,783	9.391%	-821	10,615,962	0.008%
North Dakota	772,507	4.540%	-29	772,478	0.004%
Ohio	11,723,840	4.010%	-387	11,723,453	0.003%
Oklahoma	3,987,525	6.829%	-224	3,987,301	0.006%
Oregon	4,333,252	11.132%	-397	4,332,855	0.009%
Pennsylvania	12,820,751	6.100%	-644	12,820,107	0.005%
Rhode Island	1,064,518	10.454%	-92	1,064,427	0.009%
South Carolina	5,232,238	5.005%	-216	5,232,023	0.004%
South Dakota	890,358	4.242%	-31	890,327	0.003%
Tennessee	6,896,696	6.128%	-348	6,896,348	0.005%
Texas	29,722,386	21.968%	-5,378	29,717,008	0.018%
Utah	3,274,054	10.933%	-295	3,273,759	0.009%
Vermont	621,655	4.054%	-21	621,635	0.003%
Virginia	8,625,957	11.562%	-821	8,625,136	0.010%
Washington	7,782,825	15.368%	-985	7,781,840	0.013%
Washington DC	728,813	18.478%	-111	728,702	0.015%
West Virginia	1,784,636	2.180%	-32	1,784,604	0.002%
Wisconsin	5,840,034	5.208%	-250	5,839,784	0.004%
Wyoming	575,324	6.361%	-30	575,294	0.005%
United States	333,094,933	13.887%	-38,098	333,056,836	0.011%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.

Table 4B.2: Statewide Population Projections for July 2021 with Undercount Rates Due to Citizenship Question  
Version 2: 0.08% Undercount for all Non-Citizens and Households that Include Non-Citizens

State	Projected Population July 2021	Percent Non-Citizen or Living with Non- Citizen	Statewide Undercount	Population Estimate (As of July 2021) with Undercount	Statewide Undercount Percentage
Alabama	4,921,359	4.747%	-192	4,921,167	0.004%
Alaska	743,860	9.189%	-56	743,803	0.008%
Arizona	7,448,469	15.747%	-966	7,447,503	0.013%
Arkansas	3,057,619	6.054%	-152	3,057,466	0.005%
California	40,674,529	26.669%	-8,933	40,665,596	0.022%
Colorado	5,977,784	11.199%	-551	5,977,233	0.009%
Connecticut	3,572,232	14.167%	-417	3,571,815	0.012%
Delaware	999,168	10.865%	-89	999,078	0.009%
Florida	22,512,396	17.609%	-3,264	22,509,132	0.015%
Georgia	10,905,871	11.283%	-1,014	10,904,857	0.009%
Hawaii	1,440,733	16.570%	-197	1,440,536	0.014%
Idaho	1,838,472	5.984%	-91	1,838,381	0.005%
Illinois	12,695,472	15.188%	-1,588	12,693,884	0.013%
Indiana	6,766,096	7.481%	-417	6,765,679	0.006%
Iowa	3,199,934	6.280%	-165	3,199,768	0.005%
Kansas	2,931,301	7.359%	-178	2,931,123	0.006%
Kentucky	4,513,134	4.630%	-172	4,512,962	0.004%
Louisiana	4,732,077	4.413%	-172	4,731,905	0.004%
Maine	1,345,295	3.869%	-43	1,345,252	0.003%
Maryland	6,162,919	13.982%	-710	6,162,209	0.012%
Massachusetts	6,997,726	15.032%	-866	6,996,860	0.012%
Michigan	10,026,131	6.948%	-574	10,025,557	0.006%
Minnesota	5,745,639	8.904%	-421	5,745,218	0.007%
Mississippi	2,978,138	1.958%	-48	2,978,090	0.002%
Missouri	6,188,234	4.158%	-212	6,188,023	0.003%
Montana	1,092,463	2.551%	-23	1,092,440	0.002%
Nebraska	1,973,371	10.607%	-172	1,973,199	0.009%
Nevada	3,232,808	20.201%	-538	3,232,270	0.017%
New Hampshire	1,361,809	4.931%	-55	1,361,754	0.004%
New Jersey	9,089,741	20.526%	-1,537	9,088,204	0.017%
New Mexico	2,094,569	9.857%	-170	2,094,399	0.008%
New York	19,950,879	19.532%	-3,209	19,947,670	0.016%
North Carolina	10,731,238	9.374%	-829	10,730,409	0.008%
North Dakota	778,212	4.628%	-30	778,182	0.004%
Ohio	11,745,584	4.073%	-394	11,745,190	0.003%
Oklahoma	4,006,412	6.757%	-223	4,006,189	0.006%
Oregon	4,396,744	11.067%	-401	4,396,343	0.009%
Pennsylvania	12,825,822	6.178%	-652	12,825,170	0.005%
Rhode Island	1,066,145	10.232%	-90	1,066,055	0.008%
South Carolina	5,301,528	4.946%	-216	5,301,312	0.004%
South Dakota	897,255	4.474%	-33	897,222	0.004%
Tennessee	6,956,934	6.159%	-353	6,956,581	0.005%
Texas	30,194,983	21.961%	-5,461	30,189,522	0.018%
Utah	3,331,461	10.913%	-299	3,331,162	0.009%
Vermont	620,988	4.116%	-21	620,967	0.003%
Virginia	8,677,936	11.578%	-828	8,677,108	0.010%
Washington	7,908,519	15.686%	-1,022	7,907,497	0.013%
Washington DC	740,426	19.438%	-119	740,308	0.016%
West Virginia	1,774,229	2.407%	-35	1,774,194	0.002%
Wisconsin	5,854,884	5.247%	-253	5,854,631	0.004%
Wyoming	573,993	6.649%	-31	573,962	0.005%
United States	335,553,518	13.925%	-38,482	335,515,036	0.011%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017  
Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4C.2: Statewide Population Projections for July 2022 with Undercount Rates Due to Citizenship Question  
Version 2: 0.08% Undercount for all Non-Citizens and Households that Include Non-Citizens

State	Projected Population July 2022	Percent Non- Citizen or Living with Non-Citizen	Statewide Undercount	Population Estimate (As of July 2022) with Undercount	Statewide Undercount Percentage
Alabama	4,933,012	4.874%	-198	4,932,814	0.004%
Alaska	744,876	9.758%	-60	744,816	0.008%
Arizona	7,556,519	15.615%	-972	7,555,547	0.013%
Arkansas	3,070,953	5.999%	-152	3,070,802	0.005%
California	40,958,998	26.373%	-8,898	40,950,100	0.022%
Colorado	6,070,441	11.091%	-554	6,069,887	0.009%
Connecticut	3,568,244	14.373%	-422	3,567,822	0.012%
Delaware	1,008,475	11.192%	-93	1,008,382	0.009%
Florida	22,894,395	17.722%	-3,341	22,891,054	0.015%
Georgia	11,024,994	11.285%	-1,025	11,023,969	0.009%
Hawaii	1,444,032	16.676%	-198	1,443,833	0.014%
Idaho	1,868,854	5.757%	-89	1,868,766	0.005%
Illinois	12,668,835	15.421%	-1,609	12,667,226	0.013%
Indiana	6,790,915	7.817%	-437	6,790,478	0.006%
Iowa	3,213,489	6.338%	-168	3,213,322	0.005%
Kansas	2,935,846	7.169%	-173	2,935,672	0.006%
Kentucky	4,527,870	4.710%	-176	4,527,694	0.004%
Louisiana	4,744,012	4.461%	-174	4,743,838	0.004%
Maine	1,347,642	4.002%	-44	1,347,598	0.003%
Maryland	6,190,604	14.010%	-714	6,189,890	0.012%
Massachusetts	7,032,203	15.238%	-882	7,031,321	0.013%
Michigan	10,042,086	7.130%	-590	10,041,496	0.006%
Minnesota	5,787,898	9.123%	-435	5,787,463	0.008%
Mississippi	2,976,648	1.892%	-46	2,976,602	0.002%
Missouri	6,206,910	4.230%	-216	6,206,694	0.003%
Montana	1,102,956	2.593%	-24	1,102,932	0.002%
Nebraska	1,986,695	11.058%	-181	1,986,514	0.009%
Nevada	3,291,500	19.990%	-542	3,290,958	0.016%
New Hampshire	1,366,563	4.855%	-55	1,366,509	0.004%
New Jersey	9,110,765	20.846%	-1,564	9,109,201	0.017%
New Mexico	2,096,194	9.449%	-163	2,096,031	0.008%
New York	19,976,249	19.533%	-3,215	19,973,034	0.016%
North Carolina	10,845,692	9.358%	-836	10,844,856	0.008%
North Dakota	783,917	4.718%	-30	783,886	0.004%
Ohio	11,767,327	4.138%	-401	11,766,926	0.003%
Oklahoma	4,025,299	6.687%	-222	4,025,078	0.006%
Oregon	4,460,235	11.003%	-404	4,459,832	0.009%
Pennsylvania	12,830,894	6.258%	-662	12,830,232	0.005%
Rhode Island	1,067,771	10.015%	-88	1,067,683	0.008%
South Carolina	5,370,818	4.888%	-216	5,370,602	0.004%
South Dakota	904,152	4.718%	-35	904,117	0.004%
Tennessee	7,017,171	6.190%	-358	7,016,813	0.005%
Texas	30,667,580	21.954%	-5,546	30,662,034	0.018%
Utah	3,388,868	10.892%	-304	3,388,564	0.009%
Vermont	620,321	4.179%	-21	620,300	0.003%
Virginia	8,729,915	11.593%	-834	8,729,081	0.010%
Washington	8,034,213	16.011%	-1,060	8,033,153	0.013%
Washington DC	752,040	20.448%	-127	751,913	0.017%
West Virginia	1,763,822	2.657%	-39	1,763,784	0.002%
Wisconsin	5,869,734	5.286%	-255	5,869,479	0.004%
Wyoming	572,663	6.951%	-33	572,630	0.006%
United States	338,012,104	13.965%	-38,880	337,973,223	0.012%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.

Table 4A.3: Statewide Population Projections for July 2020 with Undercount Rates Due to Citizenship Question  
Version 3: 0.5% Undercount for all Non-Citizens

State	Projected Population July 2020	Percent Non- Citizen	Statewide Undercount	Population Estimate (As of July 2020) with Undercount	Statewide Undercount Percentage
Alabama	4,909,706	2.400%	-589	4,909,117	0.010%
Alaska	742,844	3.430%	-128	742,716	0.020%
Arizona	7,340,419	6.960%	-2,555	7,337,864	0.030%
Arkansas	3,044,284	2.990%	-454	3,043,829	0.010%
California	40,390,060	12.190%	-24,624	40,365,436	0.060%
Colorado	5,885,126	5.400%	-1,588	5,883,538	0.030%
Connecticut	3,576,220	6.980%	-1,248	3,574,973	0.030%
Delaware	989,861	5.420%	-268	989,592	0.030%
Florida	22,130,397	9.300%	-10,293	22,120,104	0.050%
Georgia	10,786,748	5.780%	-3,119	10,783,629	0.030%
Hawaii	1,437,434	7.220%	-519	1,436,915	0.040%
Idaho	1,808,090	2.520%	-228	1,807,862	0.010%
Illinois	12,722,110	7.330%	-4,663	12,717,447	0.040%
Indiana	6,741,276	3.600%	-1,212	6,740,064	0.020%
Iowa	3,186,378	3.010%	-479	3,185,899	0.020%
Kansas	2,926,757	3.780%	-554	2,926,203	0.020%
Kentucky	4,498,397	2.370%	-533	4,497,864	0.010%
Louisiana	4,720,141	2.450%	-577	4,719,564	0.010%
Maine	1,342,948	1.300%	-87	1,342,861	0.010%
Maryland	6,135,233	7.190%	-2,204	6,133,029	0.040%
Massachusetts	6,963,249	8.700%	-3,031	6,960,219	0.040%
Michigan	10,010,176	3.830%	-1,917	10,008,259	0.020%
Minnesota	5,703,381	3.990%	-1,137	5,702,244	0.020%
Mississippi	2,979,629	1.040%	-154	2,979,474	0.010%
Missouri	6,169,559	2.200%	-680	6,168,879	0.010%
Montana	1,081,971	1.160%	-63	1,081,908	0.010%
Nebraska	1,960,047	5.130%	-503	1,959,545	0.030%
Nevada	3,174,115	9.890%	-1,570	3,172,546	0.050%
New Hampshire	1,357,056	3.350%	-227	1,356,829	0.020%
New Jersey	9,068,717	10.470%	-4,747	9,063,970	0.050%
New Mexico	2,092,944	4.340%	-454	2,092,490	0.020%
New York	19,925,509	9.670%	-9,633	19,915,876	0.050%
North Carolina	10,616,783	4.870%	-2,586	10,614,197	0.020%
North Dakota	772,507	2.630%	-102	772,405	0.010%
Ohio	11,723,840	2.210%	-1,296	11,722,544	0.010%
Oklahoma	3,987,525	3.610%	-720	3,986,805	0.020%
Oregon	4,333,252	4.860%	-1,054	4,332,198	0.020%
Pennsylvania	12,820,751	3.460%	-2,216	12,818,535	0.020%
Rhode Island	1,064,518	5.660%	-301	1,064,217	0.030%
South Carolina	5,232,238	2.600%	-681	5,231,557	0.010%
South Dakota	890,358	2.680%	-119	890,239	0.010%
Tennessee	6,896,696	3.100%	-1,069	6,895,628	0.020%
Texas	29,722,386	10.630%	-15,790	29,706,596	0.050%
Utah	3,274,054	5.420%	-888	3,273,166	0.030%
Vermont	621,655	2.870%	-89	621,566	0.010%
Virginia	8,625,957	5.630%	-2,427	8,623,530	0.030%
Washington	7,782,825	7.840%	-3,051	7,779,774	0.040%
Washington DC	728,813	9.660%	-352	728,460	0.050%
West Virginia	1,784,636	0.760%	-68	1,784,568	0.000%
Wisconsin	5,840,034	2.650%	-774	5,839,260	0.010%
Wyoming	575,324	1.910%	-55	575,269	0.010%
United States	333,094,933	6.830%	-113,678	332,981,256	0.030%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4B.3: Statewide Population Projections for July 2021 with Undercount Rates Due to Citizenship Question  
Version 3: 0.5% Undercount for all Non-Citizens

State	Projected Population July 2021	Percent Non- Citizen	Statewide Undercount	Population Estimate (As of July 2021) with Undercount	Statewide Undercount Percentage
Alabama	4,921,359	2.457%	-605	4,920,754	0.012%
Alaska	743,860	3.452%	-128	743,731	0.017%
Arizona	7,448,469	6.767%	-2,520	7,445,949	0.034%
Arkansas	3,057,619	2.914%	-445	3,057,173	0.015%
California	40,674,529	11.948%	-24,301	40,650,228	0.060%
Colorado	5,977,784	5.322%	-1,590	5,976,194	0.027%
Connecticut	3,572,232	6.947%	-1,241	3,570,991	0.035%
Delaware	999,168	5.596%	-280	998,888	0.028%
Florida	22,512,396	9.304%	-10,472	22,501,924	0.047%
Georgia	10,905,871	5.791%	-3,158	10,902,713	0.029%
Hawaii	1,440,733	7.227%	-521	1,440,212	0.036%
Idaho	1,838,472	2.328%	-214	1,838,258	0.012%
Illinois	12,695,472	7.434%	-4,719	12,690,753	0.037%
Indiana	6,766,096	3.710%	-1,255	6,764,841	0.019%
Iowa	3,199,934	2.986%	-478	3,199,456	0.015%
Kansas	2,931,301	3.708%	-544	2,930,758	0.019%
Kentucky	4,513,134	2.377%	-536	4,512,598	0.012%
Louisiana	4,732,077	2.462%	-583	4,731,494	0.012%
Maine	1,345,295	1.227%	-83	1,345,212	0.006%
Maryland	6,162,919	7.133%	-2,198	6,160,721	0.036%
Massachusetts	6,997,726	8.927%	-3,124	6,994,603	0.045%
Michigan	10,026,131	3.959%	-1,985	10,024,146	0.020%
Minnesota	5,745,639	3.988%	-1,146	5,744,494	0.020%
Mississippi	2,978,138	0.994%	-148	2,977,990	0.005%
Missouri	6,188,234	2.254%	-697	6,187,537	0.011%
Montana	1,092,463	1.162%	-64	1,092,400	0.006%
Nebraska	1,973,371	5.330%	-526	1,972,845	0.027%
Nevada	3,232,808	9.819%	-1,587	3,231,221	0.049%
New Hampshire	1,361,809	3.479%	-237	1,361,573	0.017%
New Jersey	9,089,741	10.578%	-4,808	9,084,933	0.053%
New Mexico	2,094,569	4.058%	-425	2,094,144	0.020%
New York	19,950,879	9.572%	-9,549	19,941,330	0.048%
North Carolina	10,731,238	4.851%	-2,603	10,728,635	0.024%
North Dakota	778,212	2.674%	-104	778,108	0.013%
Ohio	11,745,584	2.232%	-1,311	11,744,273	0.011%
Oklahoma	4,006,412	3.570%	-715	4,005,697	0.018%
Oregon	4,396,744	4.735%	-1,041	4,395,703	0.024%
Pennsylvania	12,825,822	3.533%	-2,265	12,823,557	0.018%
Rhode Island	1,066,145	5.571%	-297	1,065,848	0.028%
South Carolina	5,301,528	2.564%	-680	5,300,849	0.013%
South Dakota	897,255	2.967%	-133	897,122	0.015%
Tennessee	6,956,934	3.084%	-1,073	6,955,861	0.015%
Texas	30,194,983	10.584%	-15,979	30,179,004	0.053%
Utah	3,331,461	5.445%	-907	3,330,554	0.027%
Vermont	620,988	3.063%	-95	620,893	0.015%
Virginia	8,677,936	5.524%	-2,397	8,675,539	0.028%
Washington	7,908,519	7.973%	-3,153	7,905,366	0.040%
Washington DC	740,426	9.846%	-365	740,062	0.049%
West Virginia	1,774,229	0.760%	-67	1,774,162	0.004%
Wisconsin	5,854,884	2.664%	-780	5,854,105	0.013%
Wyoming	573,993	1.809%	-52	573,941	0.009%
United States	335,553,518	6.805%	-114,179	335,439,339	0.034%

Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 4C.3: Statewide Population Projections for July 2022 with Undercount Rates Due to Citizenship Question  
Version 3: 0.5% Undercount for all Non-Citizens

State	Projected Population July 2022	Percent Non- Citizen	Statewide Undercount	Population Estimate (As of July 2022) with Undercount	Statewide Undercount Percentage
Alabama	4,933,012	2.514%	-620	4,932,392	0.013%
Alaska	744,876	3.472%	-129	744,747	0.017%
Arizona	7,556,519	6.576%	-2,485	7,554,034	0.033%
Arkansas	3,070,953	2.844%	-437	3,070,517	0.014%
California	40,958,998	11.709%	-23,982	40,935,016	0.059%
Colorado	6,070,441	5.248%	-1,593	6,068,849	0.026%
Connecticut	3,568,244	6.917%	-1,234	3,567,010	0.035%
Delaware	1,008,475	5.775%	-291	1,008,184	0.029%
Florida	22,894,395	9.307%	-10,653	22,883,742	0.047%
Georgia	11,024,994	5.799%	-3,197	11,021,797	0.029%
Hawaii	1,444,032	7.231%	-522	1,443,509	0.036%
Idaho	1,868,854	2.153%	-201	1,868,653	0.011%
Illinois	12,668,835	7.540%	-4,777	12,664,058	0.038%
Indiana	6,790,915	3.828%	-1,300	6,789,616	0.019%
Iowa	3,213,489	2.967%	-477	3,213,013	0.015%
Kansas	2,935,846	3.633%	-533	2,935,312	0.018%
Kentucky	4,527,870	2.381%	-539	4,527,331	0.012%
Louisiana	4,744,012	2.478%	-588	4,743,425	0.012%
Maine	1,347,642	1.161%	-78	1,347,564	0.006%
Maryland	6,190,604	7.079%	-2,191	6,188,413	0.035%
Massachusetts	7,032,203	9.155%	-3,219	7,028,984	0.046%
Michigan	10,042,086	4.091%	-2,054	10,040,032	0.020%
Minnesota	5,787,898	3.989%	-1,155	5,786,743	0.020%
Mississippi	2,976,648	0.954%	-142	2,976,506	0.005%
Missouri	6,206,910	2.305%	-715	6,206,195	0.012%
Montana	1,102,956	1.159%	-64	1,102,892	0.006%
Nebraska	1,986,695	5.539%	-550	1,986,144	0.028%
Nevada	3,291,500	9.747%	-1,604	3,289,896	0.049%
New Hampshire	1,366,563	3.614%	-247	1,366,316	0.018%
New Jersey	9,110,765	10.688%	-4,869	9,105,896	0.053%
New Mexico	2,096,194	3.791%	-397	2,095,797	0.019%
New York	19,976,249	9.477%	-9,467	19,966,782	0.047%
North Carolina	10,845,692	4.831%	-2,619	10,843,073	0.024%
North Dakota	783,917	2.713%	-106	783,810	0.014%
Ohio	11,767,327	2.252%	-1,325	11,766,002	0.011%
Oklahoma	4,025,299	3.529%	-710	4,024,589	0.018%
Oregon	4,460,235	4.608%	-1,027	4,459,208	0.023%
Pennsylvania	12,830,894	3.610%	-2,316	12,828,578	0.018%
Rhode Island	1,067,771	5.479%	-293	1,067,479	0.027%
South Carolina	5,370,818	2.524%	-678	5,370,140	0.013%
South Dakota	904,152	3.284%	-148	904,004	0.016%
Tennessee	7,017,171	3.070%	-1,077	7,016,094	0.015%
Texas	30,667,580	10.543%	-16,166	30,651,414	0.053%
Utah	3,388,868	5.467%	-926	3,387,942	0.027%
Vermont	620,321	3.271%	-101	620,220	0.016%
Virginia	8,729,915	5.423%	-2,367	8,727,548	0.027%
Washington	8,034,213	8.109%	-3,257	8,030,956	0.041%
Washington DC	752,040	10.032%	-377	751,662	0.050%
West Virginia	1,763,822	0.757%	-67	1,763,756	0.004%
Wisconsin	5,869,734	2.677%	-785	5,868,949	0.013%
Wyoming	572,663	1.711%	-49	572,614	0.009%
United States	338,012,104	6.787%	-114,706	337,897,398	0.034%

## Note:

Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 5 (Corrected): Select Urbanized Areas Population Projections for April 2020 With Undercount Rates Due to Citizenship Question

Urbanized Area	Projected Population	Percent Hispanic	Percent Non-Hispanic, Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Atlanta, GA Urbanized Area	5,290,847	11.97%	5.23%	18,202	5,272,645	0.34%
Houston, TX Urbanized Area	5,924,517	40.54%	4.31%	53,152	5,871,365	0.90%
Laredo, TX Urbanized Area	268,594	95.47%	0.24%	5,141	263,453	1.91%
Las Vegas–Henderson, NV Urbanized Area	2,241,788	32.76%	3.80%	16,395	2,225,392	0.73%
Los Angeles–Long Beach–Anaheim, CA Urbanized Area	12,765,635	47.08%	5.59%	134,474	12,631,161	1.05%
McAllen, TX Urbanized Area	835,516	92.91%	0.36%	15,586	819,930	1.87%
Miami, FL Urbanized Area	6,291,588	47.31%	5.19%	66,062	6,225,526	1.05%
Phoenix–Mesa, AZ Urbanized Area	4,237,700	30.61%	3.04%	28,523	4,209,177	0.67%
Texas portion of El Paso, TX–NM Urbanized Area	785,913	83.23%	0.81%	13,209	772,704	1.68%
New Jersey portion of New York–Newark, NY–NJ–CT Urbanized Area	6,348,055	23.33%	6.35%	37,679	6,310,377	0.59%
Maryland portion of Washington, DC–VA–MD Urbanized Area	1,875,855	19.05%	6.69%	9,659	1,866,196	0.51%

**Revised Gurrea Table 6**  
**2020 Projected Undercounts Due to Citizenship Question by Jurisdiction, Before Imputation**  
**Correcting Application of "Mathiowetz 2% Undercount" Calculation**

Jurisdiction	Jurisdiction Undercount Percentage	
	Brace 2% Scenario	Brace 2% Scenario with Historical NRFU
Urbanized Area		
Atlanta, GA	0.344%	0.105%
Houston, TX	0.897%	0.208%
Laredo, TX	1.914%	0.321%
Las Vegas–Henderson, NV	0.731%	0.162%
Los Angeles–Long Beach–Anaheim, CA	1.053%	0.219%
McAllen, TX	1.865%	0.298%
Miami, FL	1.050%	0.242%
Phoenix–Mesa, AZ	0.673%	0.124%
Texas portion of El Paso, TX–NM	1.681%	0.251%
New Jersey portion of New York–Newark, NY–NJ–CT	0.594%	0.153%
Maryland portion of Washington, DC–VA–MD	0.515%	0.168%
State		
Arizona	0.691%	0.113%
California	0.893%	0.180%
Florida	0.615%	0.132%
Georgia	0.262%	0.073%
Maryland	0.284%	0.089%
Nevada	0.659%	0.137%
New Jersey	0.517%	0.127%
Texas	0.864%	0.161%

Sources:

1. Brace Report.
2. NRFU Success Rate.docx.

Notes:

1. Baseline population, percent Hispanic and percent non-Hispanic/non-citizen are rounded.
2. If the 2 percent undercount assumption is interpreted as decline in self-response rates before NRFU, and if the Historical NRFU rate is applied, undercounts are smaller than in the two scenarios reported.

REVISION NOTE: This table was modified by using the percent of non-citizens rather than the percent of non-Hispanic non-citizens when calculating the "Mathiowetz 2% Undercount with Historical NRFU"



Table 5.1: Select Urbanized Areas' Population Projections for April 2020 with Undercount Rates Due to Citizenship  
Version 1: 0.08% Undercount for all Non-Citizens and Households that Include Non-Citizens

Urbanized Area	Projected Population	Percent Non-Citizen or Living with Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Atlanta, GA Urbanized Area	5,290,847	16.584%	-723	5,290,125	0.014%
Houston, TX Urbanized Area	5,924,517	30.312%	-1,479	5,923,038	0.025%
Laredo, TX Urbanized Area	268,594	59.907%	-133	268,462	0.049%
Las Vegas–Henderson, NV Urbanized Area	2,241,788	25.238%	-466	2,241,322	0.021%
Los Angeles–Long Beach–Anaheim, CA Urbanized Area	12,765,635	33.180%	-3,489	12,762,146	0.027%
McAllen, TX Urbanized Area	835,516	42.617%	-293	835,222	0.035%
Miami, FL Urbanized Area	6,291,588	32.852%	-1,702	6,289,886	0.027%
Phoenix–Mesa, AZ Urbanized Area	4,237,700	19.498%	-681	4,237,019	0.016%
Texas portion of El Paso, TX Urbanized Area	785,913	26.601%	-172	785,741	0.022%
New Jersey portion New York–Newark, NJ Urbanized Area	6,348,055	23.725%	-1,240	6,346,815	0.020%
Maryland portion Washington, MD Urbanized Area	1,875,855	24.959%	-386	1,875,469	0.021%

*Note:*

*Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017*

*Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.*

*ACS micro-data is available at the PUMA level, which are converted to Urbanized Areas by applying "allocation factors" from a PUMA-to-Urbanized Area crosswalk derived from the MABLE geographic database*

Table 6.1: Select State Population Projections for April 2020 with Undercount Rates Due to Citizenship Question  
Version 1: 0.08% Undercount for all Non-Citizens and Households that Include Non-Citizens

State	Projected Population	Percent Non-Citizen or Living with Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Arizona	7,288,368	15.914%	-955	7,287,413	0.013%
California	40,222,359	27.043%	-8,959	40,213,400	0.022%
Florida	22,039,435	17.469%	-3,171	22,036,264	0.014%
Georgia	10,743,754	11.280%	-998	10,742,756	0.009%
Maryland	6,096,795	13.947%	-700	6,096,095	0.011%
Nevada	3,151,890	20.468%	-531	3,151,359	0.017%
New Jersey	8,992,841	20.133%	-1,491	8,991,350	0.017%
Texas	29,601,688	21.970%	-5,356	29,596,332	0.018%

Note:

Population Projections are as in Expert Report of Kimball Brace.

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.



Table 5.2: Select Urbanized Areas' Population Projections for April 2020 with Undercount Rates Due to Citizenship Question  
Version 2: 0.5% Undercount for all Non-Citizens

Urbanized Area	Projected Population	Percent Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Atlanta, GA Urbanized Area	5,290,847	8.672%	-2,294	5,288,553	0.043%
Houston, TX Urbanized Area	5,924,517	14.810%	-4,387	5,920,130	0.074%
Laredo, TX Urbanized Area	268,594	21.651%	-291	268,303	0.108%
Las Vegas–Henderson, NV Urbanized Area	2,241,788	12.273%	-1,376	2,240,412	0.061%
Los Angeles–Long Beach–Anaheim, CA Urbanized Area	12,765,635	15.026%	-9,591	12,756,044	0.075%
McAllen, TX Urbanized Area	835,516	16.705%	-698	834,818	0.084%
Miami, FL Urbanized Area	6,291,588	17.534%	-5,516	6,286,073	0.088%
Phoenix–Mesa, AZ Urbanized Area	4,237,700	8.524%	-1,806	4,235,894	0.043%
Texas portion of El Paso, TX Urbanized Area	785,913	11.003%	-432	785,481	0.055%
New Jersey portion New York–Newark, NJ Urbanized Area	6,348,055	12.344%	-3,918	6,344,138	0.062%
Maryland portion Washington, MD Urbanized Area	1,875,855	12.712%	-1,192	1,874,663	0.064%

*Note:*

*Projections of population levels are based on trends in population levels in the ACS 1-year summary files, from 2014 to 2017*

*Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.*

*ACS micro-data is available at the PUMA level, which are converted to Urbanized Areas by applying "allocation factors" from a PUMA-to-Urbanized Area crosswalk derived from the MABLE geographic database*

Table 6.2: Select State Population Projections for April 2020 with Undercount Rates Due to Citizenship Question  
Version 2: 0.5% Undercount for all Non-Citizens

State	Projected Population	Percent Non-Citizen	Census Undercount	Projected Census Count	Census Undercount Percentage
Arizona	7,288,368	7.012%	-2,555	7,285,813	0.035%
California	40,222,359	12.254%	-24,643	40,197,716	0.061%
Florida	22,039,435	9.301%	-10,249	22,029,186	0.047%
Georgia	10,743,754	5.781%	-3,106	10,740,648	0.029%
Maryland	6,096,795	7.200%	-2,195	6,094,600	0.036%
Nevada	3,151,890	9.909%	-1,562	3,150,329	0.050%
New Jersey	8,992,841	10.442%	-4,695	8,988,146	0.052%
Texas	29,601,688	10.636%	-15,742	29,585,946	0.053%

Note:

Population Projections are as in Expert Report of Kimball Brace.

Projections of population ratios (e.g. "Percent Hispanic") are based on trends in those ratios in the ACS 1-year PUMS files, from 2014 to 2017.